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Epidemiology

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SOUTH AFRICA

Insurance Firms Pay AIDS Deaths Claims 54000052 Johannesburg *BUSINESS DAY* in English 19 Jan 89 p 1

[Article by Dianna Games]

[Text] SA insurance companies have paid out R3,3m since 1984 to 30 policyholders in 47 claims for deaths due to AIDS, it was disclosed this week.

Jakes Greyling, senior underwriter for Mercantile and General, which is collating information on AIDS on behalf of the Life Officers' Association (LOA), said the claims averaged R155,000. Many were paid out within two years of the life policy being written.

This meant insurance companies were making an enormous loss on the claims, he said.

Of 44 claims, five were within a year of taking out the policy, 10 claimed between one and two years, six between two and three years, seven between three and four years, three between four and five years and 13 over five years.

The average age of the claimants was 36.5 years, he said.

It was worrying that the number of policies claimed was escalating rapidly, he added.

In 1984 one policy was claimed, two were claimed in 1985, seven in 1986, 11 in 1987 while this more than doubled to 26 in 1988.

He said while several insurance companies were introducing clauses to try and cover themselves, they could not close all the loopholes and it was seldom that AIDS or HIV was mentioned on the death certificate.

He said companies were now having to reserve finance for AIDS claims.

TANZANIA

New Poultry Disease Breaks Out in Dar-es-Salaam 54000051a Dar-es-Salaam *DAILY NEWS* in English 16 Jan 89 p 1

[Text] A new severe and highly infectious poultry disease has broken out in Dar es Salaam.

The disease dubbed *gumboro*, is medically known as *Infectious Bursal Disease (IBD)* or *Infectious Avian Nephrosis*.

Officials in the Ministry of Agriculture and Livestock Development said the disease was endemic in Western Europe and the United States.

They say it might have been "imported" through contaminated eggs, feeds, formites, live vaccines or infected chicks.

The first case in the country was diagnosed at the Tembeke-Based Animal Disease Research Institute last December 14. Symptoms include severe depression, tremour, severe whitish diarrhoea, rough feathering and sticky litter. Others are soiled vent feathers and vent picking.

The disease affects young chicks of between two and nine weeks but with concentrated attack in birds of between three and six weeks, the officials said.

The disease, caused by a virus belonging to a family of reoviruses of the orbi genus, is spread through bird to bird contact and through contaminated water, feeds, faeces and equipment.

The Government has ordered vaccines for jabbing chicken and other related birds. Surviving birds in already infected pens will not need the vaccines as they shall have acquired immunity, officials said.

"Once a farm is infected, only very thorough clearing and disinfection can eliminate the disease," an official said.

Breeding of Wasps for Mealybug Control Reported 54000051b Dar-es-Salaam *DAILY NEWS* in English 17 Jan 89 p 1

[Text] Tanzania plans to breed wasps that attack the mealybug, *epidinocarsis lopezi*, to step up the biological control of the pest that has caused great concern among the people and government officials.

Assistant Commissioner in the Ministry of Agriculture and Livestock Development responsible for plant protection, Ndugu A. M. Mushi, said drawings for the insectary to be established at the Kibaha Tanzania Agricultural Research Organisation Centre were ready and tenders for the work would be floated soon.

He said instead of waiting for the wasps to come from Nigeria, the *epidinocarsis lopezi* would be reared in the country for speedy intervention.

Experts were expected to come from the Nigeria-based International Institute for Tropical Agriculture (IITA) to assist in the establishment of the insectary and training of control personnel, Ndugu Mushi said.

He said sporadic incidents of cassava mealybug were worrying the ministry, adding that the pest's recent outbreak in Musoma District was "very frustrating news".

Ndugu Mushi said he could not understand how the mealybug had skipped from Kigoma Region to Mara Region, leaving in between Kagera and Mwanza regions.

He, however, said the predator wasps would not completely destroy the mealybug because once that happened the wasps themselves would not continue to exist. "Since they feed on the mealybug, once the bug is completely destroyed they will also perish," he said.

It was reported yesterday that the mealybug had attacked 17 villages in Musoma District, leaving 12,317 residents with little food. Cassava is the staple food for Musoma District residents.

The insectary is expected to be ready before April, this year.

Update on AIDS-Related Issues

Risk Study

54200029 Toronto *THE TORONTO STAR in English*
18 Jan 89 p A12

[Article by Kelly Toughill]

[Text] The risk of catching the AIDS virus from a human bite is very small, according to a new Canadian study that confirms what many researchers have long believed.

The study, reported in the JOURNAL OF ACQUIRED IMMUNE DEFICIENCY SYNDROMES, found none of 30 health-care workers who were scratched or bitten by a patient with AIDS became infected with the virus.

Researchers in Montreal studied 198 nurses, orderlies and nursing attendants who cared for a violent man with AIDS for three years.

Because of a car accident, the man required constant nursing care. However, he was often aggressive and unco-operative, forcing attendants to come into contact with virus-infected body fluids. The patient had bleeding gums and was incontinent.

Thirty of the health-care workers were assaulted by the patient, including eight people who were bitten.

But the study said "we did not find any evidence of acquired immune dysfunction or transmission of (the AIDS virus) to those health-care workers who were scratched, cut or bitten."

AIDS is caused by a virus found in blood and semen and is most often spread during sex or the sharing of needles by infected drug users. Some people have worried the virus could be passed on through a human bite because it is sometimes found in saliva, though in much smaller concentrations.

The study concludes the risk of catching the AIDS virus from a bite or scratch is small.

Safe Sex Guidelines

54200029 Vancouver *THE SUN in English*
25 Jan 89 p A8

[Article by Robin Ludlow]

[Text] Ottawa—In graphic terms, the Canadian AIDS Society Tuesday unveiled "Canada's first common standard of safer sex guidelines."

The overriding message is still that the greatest risk for acquired immune deficiency syndrome is from unprotected vaginal and anal intercourse. Experts are unanimous the risk from oral sex is "very low."

The detailed guidelines might shock many Canadians but Dr Stephen Manning, a society board member and executive director of the Aids Committee of Toronto, said they must be explicit to overcome "barriers created by vagueness."

The key guidelines:

- *Very high possibility of AIDS transmission (high theoretical risk and strong evidence of transmission)—Insertive or receptive penile-vaginal intercourse without a condom, insertive or receptive penile-rectal intercourse without a condom, preejaculation penile withdrawal without a condom, shared sex toys.
- *Low possibility (some theoretical risk and only limited evidence of transmission)—Insertive cunnilingus without a barrier during menstruation, receptive fellatio without a condom with swallowing, insertive or receptive penile-vaginal intercourse with a condom, insertive or receptive penile-rectal intercourse with a condom, sadomasochistic activity where blood is drawn.
- *Minimal possibility (some theoretical risk but no evidence so far of transmission)—wet kissing, swallowing urine or feces, anilingus without a barrier, insertive fellatio with or without a condom (The NEW ENGLAND JOURNAL OF MEDICINE has reported an infection of a 60-year-old man through oral sex with a prostitute, but experts in AIDS transmission and epidemiology immediately raised reservations about the report, claiming research suggests such a transmission is highly unlikely), receptive fellatio without a condom and no swallowing, insertive cunnilingus with or without a barrier, receptive cunnilingus without a barrier.
- *No possibility (no theoretical risk and no evidence of transmission)—fellatio and vaginal and anal intercourse with a properly used and effective condom, cunnilingus and anilingus with an effective barrier, solo masturbation, dry kissing, rubbing, massaging, touching, caressing, telephone sex, erotic talk, voyeurism, pornography, fantasy, exhibitionism, licking and kissing (except mucosal linings), erotic bathing or showering, unshared sex toys, nipple stimulation without drawing blood, external urination and defecation, receptive cunnilingus with a barrier, receptive or insertive anilingus with a barrier.

Dr Randall Coates of the University of Toronto's Faculty of Medicine said the same risk scale applies to other sexual diseases.

The guidelines also note:

- *Judgment impaired by alcohol and recreational drugs can have a significant effect on the decision to participate in high-risk behavior;
- *The AIDS virus can enter the bloodstream, through sores, cuts;

*Spermicides such as nonoxynol-9 can help kill the AIDS virus, but are not advised for rectal sex because of irritation.

As of Monday, 1,337 AIDS cases had been diagnosed in Canada.

Release of Experimental Drugs

54200029 Vancouver *THE WEEKEND SUN* in English
28 Jan 89 p A1

[Text] Federal health officials have agreed to release two experimental drugs to people with AIDS, although the compounds haven't been approved for use in humans.

Aerosolized pentamidine, an inhaled antibiotic mist, and dextran sulphate, a sugar formula that appears to fight the AIDS virus in laboratory tests, are being issued under the emergency drug release program.

Under the program, a doctor can ask that an unapproved drug be released for a specific patient.

"This is very, very good news," said George Smith of AIDS Action Now. "This is everything we've been fighting for."

AIDS activists have lobbied for the release of aerosolized pentamidine for a year. Studies in Europe and the United States show regular use of the drug can prevent a form of pneumonia that frequently kills AIDS patients.

Halifax Court Case

54200029 Toronto *THE TORONTO STAR* in English
27 Jan 89 p A8

[Text] A man accused of knowingly spreading the AIDS virus to a pregnant woman will stand trial July 24 on a charge of criminal negligence causing bodily harm. Scott William Wentzell, 21, pleaded not guilty during a brief court appearance yesterday. One of the conditions of his bail is that he abstain from sex with anyone.

2,323 Cases; 1,259 Deaths

54200023 Toronto *THE TORONTO STAR* in English
11 Jan 89 p A28

[Excerpt] A total of 2,323 cases of AIDS had been reported by Jan. 3 in Canada since the first case in 1979. Of these, 1,259 people have died.

In Ontario, 920 cases have been reported, and there have been 568 deaths.

Adult cases across Canada include 1,862 homosexual or bisexual men, 17 intravenous drug abusers, 61 homosexual or bisexual men who are also intravenous drug users and 117 recipients of blood or blood products. Of the

people who acquired AIDS through heterosexual activity, 106 originated in a country where AIDS is endemic or largely spread heterosexually and 60 had sexual contact with a person at high risk.

There are also 61 persons whose risk category has not been documented.

Among the 39 children afflicted, perinatal transmission accounts for 33 cases and blood transfusions six. Twenty-two children have died of the disease.

The national rate per million is 90.0.

Toronto Needle Exchange Program

54200023 Toronto *THE TORONTO STAR* in English
13 Jan 89 p A6

[Article by Laurie Monsebraaten: "Toronto Drug Users To Get Free Needles"]

[Text] Toronto has become the first Canadian city to finance a needle-exchange program to fight the spread of AIDS among drug users.

City council endorsed a controversial \$650,000 program yesterday that will provide free clean syringes to drug users in exchange for dirty ones.

The one-year pilot project, which begins in March, will also provide education, medical help and counselling for addicts as well as referrals to rehabilitation programs.

The city will pay \$330,000 of the project's cost and is asking Queen's Park to pick up the remaining \$320,000.

Similar needle-exchange programs are proposed or partially running in Victoria, Vancouver, Edmonton and Montreal but those cities are relying on federal money yet to be approved.

Encourage Use

Council approved the project by a 15-1 vote after a two-hour of debate that centred on rehabilitation of drug users and fears the program would encourage drug abuse.

Council agreed to support the program but asked staff to report in two weeks on concerns about rehabilitation.

In a separate motion, it urged the provincial health ministry to provide free syringes to people who have a medical condition that requires drugs.

Under the city's program for drug users, needles will be available on an exchange-only basis and clients won't have to reveal their name or other information about themselves.

Twelve workers, including six counsellors, a nurse, a social worker and an AIDS educator will be hired to run a downtown clinic and mobile unit that will be open most evenings, late nights and weekends.

During the first year the program will dispense 30,000 syringes, 30,000 condoms and 20,000 needle-cleaning kits.

It will also include an extensive research project to determine if the program is slowing the spread of AIDS.

Opposed Program

Councillor Chris Korwin-Kuczynski opposed the program. "How do we fight drug abuse in this city when we're handing out free needles to addicts?" he said. Councillor Tony O'Donohue said he wanted to ensure that the city isn't just dispensing needles to drug users without trying to help them.

"Needles and cleaning equipment should be contingent upon the addict getting help," he said. "I would like some small commitment from the drug user. There has to be some strings attached."

Fred Ruf, manager of the city's AIDS defence program, said the program is already designed as a counselling and helping service.

Health board chairman Jack Layton urged council not to stall approval of the program on the rehabilitation question "in the interest of saving lives."

AIDS is caused by a virus that destroys the body's immune system, leaving a person vulnerable to other, often fatal infections. AIDS is most often passed during sex and the sharing of dirty needles by infected drug users.

So far in Canada, few people have caught the virus through sharing needles. Statistics show about 100 people in Toronto who inject drugs are infected with the virus, including three who fully developed AIDS.

Polio Diagnosed in Ontario Infant *54200024 Toronto THE GLOBE AND MAIL* *in English 17 Jan 89 p A8*

[Article by Lawrence Surtees: "Baby's Polio Diagnosis Is the First Since 1979"]

[Text] A 9-month-old Metro Toronto baby has been found to have the first case of polio in Ontario in 10 years.

The baby, who lives in Scarborough and whose identity has not been released, came down with the symptoms late last July despite having received polio vaccination shots at 3, 4 and 6 months of age.

Laboratory results in November confirmed the diagnosis of paralytic poliomyelitis, the first case in the province since 1979, public health experts say. The disease, which causes meningitis and paralysis, strikes mainly children and occurs predominantly in areas that have poor sanitation.

Health officials are anxious to assure the public that there is no problem with the polio vaccine, which is made by Connaught Laboratories Ltd. of Toronto.

"The case is extremely rare because the baby did not respond to the vaccination, which partly accounts for his illness," Dr. Zofia Davison, associate medical officer of health at the Scarborough city health unit, said yesterday.

The polio vaccine consists of three types of polio virus. Lab analysis shows that the baby had very weak antibodies to two of the virus types, meaning that the child's immune system did not respond well to the inoculation.

"No vaccine is 100 per cent effective, which seems to be the case here," Dr. Davison said.

About 2 per cent of the population does not have strong immune responses to the polio vaccine, which means they will not be adequately protected against the disease, said Dr. Luis Barreto, associate medical director at Connaught.

Dr. Davison said it is believed the baby contracted polio either from family members or from visitors to the family's apartment. She said the family is from the East Indies, where polio is still widely found, and has had contacts with people who have recently visited the East Indies.

"There are two messages from this case," Dr. Davison said. "First, that because the virus is still out there, children still need to be vaccinated against the disease. And second, that adults still need to be protected against polio with booster shots every 10 years."

Dr. Davison said the baby is recovering well and at last report was regaining limb movement.

Montreal Vaccination Program Attempts To Contain Measles

54200030 Toronto THE GLOBE AND MAIL
in English 18 Jan 89 p A3

[Text] Public health nurses will likely vaccinate about 60,000 students in a bid to contain a minor measles epidemic in schools on the western end of Montreal Island, officials said Monday.

But the doctor in charge of the program said it was largely a precautionary measure.

So far only 55 to 65 cases of the highly contagious disease have been recorded in Montreal this year, 80 percent in school-aged children in communities on the western tip of Montreal Island.

Meningitis in Rural Ontario Area Causes One Death

54200032 *Toronto THE GLOBE AND MAIL*
in English 6 Feb 89 p A3

[Article by Lawrence Surtees]

[Excerpts] Many parents of school children in Victoria County who lined up on Saturday to get an antibiotic to prevent meningitis are angry at public health officials for waiting a week after the outbreak began in the Peterborough area before dispensing the medicine.

Although public health officials says the outbreak is now under control, one child from Bethany, about 22 kilometres west of Peterborough, who attended Grandview Public School in Manvers Township, died from the illness last Monday.

Ten children, seven from rural Victoria County south of Lindsay, Ont., have been admitted to hospital with suspected or confirmed meningitis in as many days.

Nika Kaufhold, 10, died from the contagious disease in Peterborough Civic Hospital after becoming ill at a friend's house the night before. [Passage omitted]

Parents were advised on Friday to take their children to the one-day clinic organized at the school by the Haliburton, Kawartha and Pine Ridge District Health Unit.

More than 750 children attend the Grandview Public School, which also has a staff of 45 teachers, school principal Ivan Goodhand said.

But the meningitis outbreak in Victoria County began on Jan 27, three days before Nika's death. A 13-year-old boy who attends Lady Eaton Elementary School in Omemee, about 20 kilometres west of Peterborough, was admitted to Ross Memorial Hospital in Lindsay with the same form of meningococcal meningitis. [Passage omitted]

Mr Goodhand said the school has acted entirely on advice from Dr Donald Mikel, the Haliburton, Kawartha and Pine Ridge Medical Officer of Health.

Based in Cobourg, Ont, Dr Mikel had insisted until Friday that the first six cases were all "coincidental" and "unrelated." Under Ontario law, meningococcal meningitis is a reportable disease. Any confirmed or suspected case must be reported to the medical officer of health for the region in which the patient lives.

Because there was no known relationship among the cases, the schools were kept open and there was no need to dispense the rifampin antibiotic until Friday, Dr Mikel said. [Passage omitted]

The admission of a seventh case to hospital early Friday, however, established a possible link to the school and a minor league hockey tournament held at an arena across the street from the Grandview Public School. All junior hockey games scheduled at Manvers Township arena were cancelled on the weekend.

By Friday, three of Nika's school mates were admitted to hospital with the disease.

That led Dr Mikel to change his view and he now says there is an "outbreak, but not an epidemic." [Passage omitted]

Not all of the remaining six confirmed or suspected cases at Peterborough Civic are linked. One case was ruled out as meningococcal meningitis yesterday after extensive lab tests, said Dr Robert Kyle, Peterborough County Medical Officer of Health.

Both Peterborough Civic and Ross Memorial hospitals reported no further admissions of either confirmed or suspected cases yesterday or late Saturday after three cases were admitted on Friday and early Saturday. [Passage omitted]

Multiple Sclerosis Link to Soil, Water Chemistry Studied

54200031 *Ottawa THE OTTAWA CITIZEN* in English
21 Jan 89 p E1

[Text] After a five-year investigation, a group of doctors at the University of Saskatchewan announced Thursday that soil and water chemistry may be a cause of multiple sclerosis.

The doctors began researching the possible connection after Sylvia Hall, a victim of the incurable disease, insisted a high incidence of multiple sclerosis in her hometown of Henribourg, Sask, was not a coincidence.

Dr Donald Irvine, a toxicologist who conducted the study with Dr Bruno Schiefer and Dr Walter Hader, said the number of people living in Henribourg, about 156 kilometres north of Saskatoon, between 1937 and 1942 who later went on to develop the disease was 70 times higher than normal.

Saskatchewan was one of the highest rates of multiple sclerosis of any region in the world. It is a disease of the central nervous system that causes progressive degeneration of normal physical functions.

Henribourg, with a population of fewer than 100 people, had at least seven people affected, thereby designating it a "hot spot," Irvine said.

The doctors collected water and soil samples and compared the chemical results to samples from a control area.

A series of tests found there were "significantly different levels of 13 different chemicals in the samples.

The chemicals are ingested through eating and drinking, Irvine said.

During the years of the Second World War, rural residents tended to eat much more homegrown produce than usual, he said.

The multiple sclerosis outbreak occurred during that time frame and the evidence suggests there is no risk to the people of Henribourg now, he said.

Hall, 63, started putting the facts together shortly after her sister died of multiple sclerosis in 1980, the year after Hall was also diagnosed with the disease.

Both women had lived in the community.

"At first they told me it was coincidence, but 'No damned way' I told them, there had to be something to it."

She said she is thrilled about the researchers' news, but "the trick now is to keep going and find a cure."

Irvine stressed the results are preliminary, and biological and physical factors were not considered in the tests.

Tainted Mussels Reportedly Caused Memory Impairment

54200026 *Toronto THE SATURDAY STAR in English*
7 Jan 89 p A3

[Excerpts] After eating mussels in a Montreal restaurant over a year ago, Paul Berthou, spent two and a half months in hospital. He couldn't remember simple things like his weight or the day or the year. He even forgot that he and his wife had sold their house and moved.

Berthou, a 44-year-old physics teacher, is one of 150 Canadians, most from Montreal, who became ill in the fall of 1987 after eating tainted mussels from Prince Edward Island.

Now, Berthou, who has to keep lists to remind him of things, is suing the restaurant where he ate the mussels as well as the distributor of the shellfish.

He is also participating in a study by Dr. Jeannie Teitelbaum, of the Montreal Neurological Institute, who has been looking into the effects of the contaminated mussels on people like Berthou. [passage omitted]

Teitelbaum said she has personally witnessed signs of her patients' memory loss.

Scientists eventually identified the poison that caused the problem as domoic acid, a toxin that can "excite" certain brain cells "to death," Teitelbaum said.

Four people died after eating the mussels, she said. [passage omitted]

Bison Herd Afflicted With Tuberculosis, Brucellosis

54200028 *Vancouver THE SUN in English*
17 Jan 89 p A6

[Text] The largest free-roaming herd of bison in the world may have to be killed to eliminate a disease that threatens other bison as well as cattle in the area.

Killing most of the 4,200 bison in Wood Buffalo National Park to leave a healthy breeding stock of about 100 animals is one of 9 options recommended by a committee studying the animals, which are afflicted with tuberculosis and brucellosis.

Other options include fencing the park, which covers about 45,000 square kilometres in Alberta and Northwest Territories, or creating buffer zones to keep the infected bison from mingling with uninfected animals.

A five-member panel is to be appointed by acting Environment Minister Lucien Bouchard to examine the issue, said Paul Scott of the federal environmental review office.

"Members of the panel will be appointed to examine the problems of the bison as well as the options presented to them," said Scott, who will be the panel's executive secretary.

Between 35 and 50 per cent of the Wood Buffalo herd is infected with either or both of the diseases. Tuberculosis infects the lungs and other organs, while brucellosis causes pregnant animals to abort and can cause sterility among males.

Cormack Gates, a bison ecologist with the government of the Northwest Territories, said the Alberta, federal and territorial governments are seeking a solution before the disease infects other bison herds.

Tumors, Lesions Found in Vancouver Harbor Sole

54200027 *Vancouver THE SUN in English*
17 Jan 89 pp A1, A2

[Article by Margaret Munro]

[Excerpts] Vancouver Harbor is so polluted that almost 60 per cent of the English sole caught in one area had precancerous liver lesions or tumors, according to an Environment Canada study.

The study, which officials reluctantly released, says the bottom-dwelling fish in the Port Moody Arm area are sickest of all: More than 58 per cent of the English sole have liver lesions, tumors or cancers.

A brew of chemicals—high levels of lead, chromium and petroleum hydrocarbons such as benzopyrenes—found on the harbor bed is the probable cause.

Along the north and south shore of the inner harbor, where children and city-bound anglers are frequently seen fishing, the rate of liver lesions in English sole ranges from 20 to 30 per cent. In the outer harbor and the centre of the inner harbor, where fishermen catch salmon, bottom fish, prawns and crabs for sale to the public, the rate of lesions ranges from eight to 13 per cent.

The study, which analysed 66 fish caught in 1986, was repeated in 1987. The results of the second study, which are not yet published, confirm the degenerative state of the bottom-dwelling fish in the harbor, says Darcy Goyette, in charge of Environment Canada's on-going assessment of Vancouver Harbor.

The second study found the lesions or tumors in close to 60 per cent of English sole in Port Moody Arm, says Goyette, adding that five per cent of them had liver cancer.

"The number are significant when you realize the natural occurrence of liver lesions is less than one per cent in wild fish," Goyette said Monday.

Federal fisheries official Mike Nassichuk said Monday that the department is "concerned" about the diseased fish, but has no immediate plans to restrict fishing in the harbor.

He said the study was sent to health and welfare officials in Ottawa who concluded "there was no human health hazard" in consuming the sick and/or cancerous fish.

Nassichuk said that given a choice he'd eat bottom fish from cleaner waters. "But it would depend on how hungry I was," he said.

In the early 1980s, Environment Canada declared the harbor a "priority area" that warranted study. It took until 1985 to get the research underway. Goyette expects he and his colleagues will have their research reports completed in six months.

The researchers have examined more than 10,000 fish from the harbor and collected hundreds of sediment samples, some of which cost as much as \$2,000 to analyse. They are also measuring the levels of organic and toxic chemicals in tissues of crab from the harbor.

Along with the lesions and tumors, Goyette and his colleagues have noticed odd, dark red discolorations on many of English sole in the harbor. Five per cent of the fish have external growths, called papillomas, which are thought to be caused by parasitic organisms.

They have also turned up very high levels of lead, chromium, and polyaromatic hydrocarbons in the sediments in a number of locations. The highest levels are in Port Moody Arm, home of a number of industrial operations, including the 62-year-old Imperial Oil refinery.

Lead levels, for example, are about seven times higher than levels common in unpolluted environments. Officials at the Imperial refinery have seen some of the research results and are examining their discharges in an effort to minimize pollution, Goyette said.

Environment Canada was asked for the fish-lesion study in October. Public-relations officials initially said the study, which was published last August, would not be made public until all studies on the harbor were complete. They relented when THE VANCOUVER SUN said it would apply for the study under federal access-to-information legislation.

Law on Contagious Diseases Published
HK0703010989 Beijing RENMIN RIBAO in Chinese
2 Mar 89 p 6

["PRC Law on the Prevention and Treatment of Contagious Diseases, Adopted by the Sixth Session of the Seventh NPC Standing Committee on 21 February"]

[Text]

Chapter 1: General

Article 1: This law has been formulated to prevent, control, and eliminate the occurrence and spread of contagious diseases so as to ensure people's health.

Article 2: The state combines prevention and treatment and exercises categorized management with regard to contagious diseases, taking prevention as the main form.

Article 3: Contagious diseases governed by this law are classified into Category A, Category B, and Category C.

Contagious diseases in Category A include: Bubonic plague and cholera.

Contagious diseases in Category B include: Viral hepatitis, bacterial or amebic dysentery, typhoid, paratyphoid, aids, gonorrhea, syphilis, poliomyelitis, measles, pertussis, diphtheria, epidemic cerebrospiral meningitis, scarlet fever, epidemic hemorrhagic fever, rabies, leptospirosis, brucellosis, anthrax, epidemic or endemic typhus fever, epidemic meningitis B, kala-azar, malaria, and dengue.

Contagious diseases in Category C include: Phthisis, schistosomiasis, filariasis, echinococcosis, leprosy, influenza, mumps, rubella, neonate tetanus, acute hemorrhagic conjunctivitis, and infectious diarrhea caused by diseases other than cholera, dysentery, typhoid or paratyphoid.

The State Council may increase or reduce the disease types in Category A as the case requires, and will announce the change. Health administration departments under the State Council may increase or reduce the disease types in Categories B and C as the case requires, and will announce the change.

Article 4: Governments at all levels should exercise leadership over the prevention and treatment of contagious diseases, work out plans to prevent and cure contagious diseases, and ensure the implementation of these plans.

Article 5: Health administration departments under governments at all levels should exercise uniform supervision over the prevention and treatment of contagious diseases.

Epidemic prevention departments at all levels should exercise supervision, inspection, and management over the contagious diseases that fall into the scope of work designated for them according to their professional division.

Medical and health protection departments at all levels should exercise management over the contagious diseases that fall into the scope of work designated for them and should accept professional guidance from epidemic prevention departments.

Prevention and treatment of contagious diseases in Army units should proceed according to this law and other relevant state regulations under the supervision and management by the Chinese PLA health departments concerned.

Article 6: The management of food, medicine, and water in connection with the prevention and treatment of contagious diseases as well as quarantine work on the state border should be carried out according to the relevant laws.

Article 7: All units and individuals within the PRC boundary must be willing to accept checks, inspections, and investigations concerning contagious diseases by health protection and epidemic prevention departments; they also have the right to report or sue for any violation of this law.

Article 8: Units and individuals making marked achievements in preventing and controlling contagious diseases will be rewarded.

Chapter 2: Prevention

Article 9: Governments at all levels should conduct health education in the prevention of contagious diseases and organize people to eliminate rats, disease-carrying insects including mosquitoes and flies, and other harm caused by animals suffering from contagious diseases common to man.

Article 10: Governments at all levels should build and transform their public health facilities and introduce cleaning treatment for polluted water, other pollutants, excrement, and urine so that they become harmless to human beings. This will help improve the health conditions for drinking water.

Article 11: All types of medical and health departments at all levels should form disease prevention organizations to take up the responsibility for preventing and controlling contagious diseases in their units or neighborhood.

Cities, districts directly under urban jurisdiction, and counties should set up hospitals for contagious diseases or outpatient departments or wards for contagious diseases.

Article 12: The state will exercise a preventive inoculation system.

The state will exercise an inoculation card system among children.

Article 13: Water supply units must supply drinking water according to the health standards defined by relevant state regulations.

Article 14: Patients with contagious diseases, contagious disease carriers, and patients suspected of carrying contagious diseases are not allowed to undertake jobs that easily help spread contagious diseases, before their recovery or the removal of suspicion on the patients suspected of carrying contagious diseases.

Article 15: Medical protection departments, epidemic prevention organs, and units engaged in the experiment of pathogenic bacteria must strictly observe the management rules and operational regulations defined by the State Council's health administration department, so as to prevent the contagion of diseases or the spread of pathogenic bacteria in their laboratories.

Article 16: The storage, delivery, and transportation of pathogenic bacteria and toxicants must strictly abide by the regulations defined by the State Council's health administration department.

Article 17: Polluted water, other pollutants, excrement, and urine infected with contagious diseases in Category A must be strictly disinfected and handled by the relevant units and individuals under supervision by the relevant epidemic prevention organ; the relevant local government can impose compulsory measures on those who refuse to do so.

Polluted water, other pollutants, excrement, and urine infected with contagious diseases in Categories B and C must be handled by the relevant units and individuals according to the requirements set by the relevant epidemic prevention organ.

Article 18: Veterinary departments at all levels are responsible for the prevention and treatment of contagious diseases among livestock and poultry which are also common to man.

Wild animals with contagious diseases common to man are not allowed to be sold or transported without a quarantine test given by the veterinary department of the locality concerned or the veterinary department of the recipient locality.

The prevention and treatment of rabies should be undertaken by veterinary, public health, and public security departments of local governments according to the regulations of the State Council.

Article 19: Before carrying out large construction projects in places that constitute the source of natural epidemic diseases, the relevant construction department should ask the local epidemic prevention organ to carry out a health check on the relevant construction site, and epidemic prevention measures should be taken according to the opinions of the local epidemic prevention organ. In the course of construction, the construction department should assign special personnel to take charge of epidemic prevention work on the construction site.

Article 20: Personnel engaged in the prevention, cure, and scientific research of contagious diseases; personnel responsible for handling on the spot contagious diseases; and personnel who are in contact with vehicles of contagious diseases in their work and production should be provided with medical protection by the relevant department according to state regulations.

Chapter 3: Reporting and Announcing Epidemics

Article 21: Anyone who discovers an epidemic patient or a patient who seems to be suffering from a contagious disease should promptly report this to the nearest medical protection or epidemic prevention organ. Upon receipt of the report concerning the spread of contagious diseases or concerning AIDS or palmonary anthrax, the relevant medical protection or epidemic prevention organ should immediately inform the local health administration department, which is required to immediately report this to the local government. The health administration department at the higher level and the State Council's health administration department should at the same time be informed of the occurrence of these diseases.

Article 22: The relevant responsible persons of governments at all levels and personnel engaged in health protection and epidemic prevention are not allowed to cover up or provide false information about the occurrence of contagious diseases or to instruct others to do so.

Article 23: The State Council's health administration department should promptly announce the occurrence of the contagious diseases according to the facts and may also authorize the health administration departments of the relevant provinces, autonomous regions, and municipalities directly under the central government to promptly announce the occurrence of contagious diseases according to the facts.

Chapter 4: Exercising Control

Article 24: Upon their discovery of the occurrence of contagious diseases, health protection or epidemic prevention departments should promptly take the following control measures:

1) Patients with contagious diseases in Category A and patients suffering from aids and palmonary anthrax in Category B must be given isolation medical treatment.

The isolation period will be determined according to the results of medical examination. Public security departments will assist the relevant medical department in enforcing isolation medical treatment on patients who refuse such treatment or break away from it before the end of the isolation period.

2) Medical treatment and control measures should be applied to patients suffering from contagious diseases in Categories B and C according to their cases, with the exception of aids and palmonary anthrax patients.

3) Patients with contagious diseases in Category A should undergo a period of medical observation in a designated ward before the diagnoses of their illnesses are made.

4) All places, objects, and people in close contact with patients suffering from contagious diseases, patients suspected of being infected with contagious diseases, or carriers of contagious diseases must be given hygienic treatment and prevention measures.

Patients with contagious diseases, their relatives, units where they are working, and neighborhood organizations are required to cooperate with the relevant department in applying the above measures.

Article 25: In case a contagious disease breaks out and is beginning to spread, the relevant local government must immediately send people to take necessary measures to prevent the disease from spreading. If necessary, a report on this case can be submitted to the higher-level local government for its decision on the implementation of the following measures:

1) Restrictions or prohibitions will be imposed on mass gatherings including those in markets, meetings, cinemas, and theaters.

2) Production, businesses, and schools will be stopped.

3) Special arrangements will be made for housing and transportation.

4) The source of public drinking water that has been polluted by the contagious disease will be sealed.

Within the given time, the local government at county level or above should make a decision on the implementation of the above urgent measures proposed by the lower-level government.

The cancellation of the above measures will be announced by the department that decided upon its implementation.

Article 27: In case a major contagious disease breaks out, the State Council's health administration department has the right to transfer medical protection and epidemic prevention personnel from all parts of the country, including provinces, autonomous regions, and municipalities directly under the central government, to control the spread of this contagious disease; health administration departments of local governments at all levels have the right to transfer medical protection and epidemic prevention personnel from their administrative regions for the same purpose.

Article 28: In the case of death resulting from bubonic plague, cholera, or anthrax, the body must be immediately disinfected and cremated in the nearest possible place. In case of death resulting from other contagious diseases, if necessary the body should be disinfected and cremated or buried deep according to the relevant regulations.

If necessary, the relevant health protection or epidemic prevention department can perform an autopsy on the body of the patient who died from a contagious disease.

Provincial or autonomous regional People's Congress Standing Committees can exercise the above two stipulations over minority nationality areas and, if necessary, make some appropriate changes.

Article 29: Medical departments and the relevant local departments should promptly provide medicine and medical equipment for the prevention and treatment of contagious diseases. Departments engaged in the production of biological products should promptly provide such products for the prevention and treatment of contagious diseases. A certain storage of medicine, biological products, and medical equipment should be maintained for the prevention and treatment of contagious diseases.

Article 30: Railway, communications, and civil aviation departments should give priority to the transportation of personnel, medicine, biological products, and equipment required to tackle contagious diseases with the approval of the relevant health administration department.

Article 31: Detailed methods of communications and quarantine for controlling the spread of contagious diseases should be formulated by the State Council's health administration department and submitted to the State Council for approval and implementation.

Chapter 5: Supervision

Article 32: Health administration departments at all levels should exercise supervision and management over the prevention of contagious diseases:

1. They should exercise supervision and inspection over the prevention, cure, observation, and control of contagious diseases.

2. Units and individuals under medical examination should be given instructions to improve prevention and management work against contagious diseases within a given time.

3. Violations of this law will be given administration punishments according to the relevant provisions of this law.

The State Council's health administration department may authorize other health departments to implement the above stipulations within units under these health departments.

Article 33: Health administration departments at all levels, other departments authorized by the State Council's health administration department, and all types of health protection organs should appoint personnel to exercise supervision and management over the work of preventing contagious diseases entrusted by health administration departments or other health protection organs.

These personnel should be selected from among qualified health professionals; they will be appointed to their posts and provided with certificates by health administration departments at the provincial level.

Article 34: Medical protection organs at all levels should appoint personnel to exercise management over the prevention of contagious diseases in their units and to report the results of medical checks to the relevant epidemic prevention organs.

The appointment of these personnel should be approved by local health administration departments of governments at the county level, which will also issue certificates for them.

Chapter 6: Legal Responsibility

Article 35: Governments at the county level and above are responsible for ordering the correction of violations of this law within a given time in any of the following cases, and they may also impose fines on these violations; violations of this law which cause the spread of contagious diseases should be reported to by the relevant health administration department to the government at the same level, which will take compulsory measures against such diseases:

- 1) In case drinking water supplied by water supply departments falls short of the state's relevant health standards;
- 2) In case of refusal to carry out disinfection processes according to health requirements set by the relevant epidemic prevention department with regard to polluted water, other pollutants, excrement, and urine;
- 3) In case patients with contagious diseases, patients suspected of being infected with contagious diseases, or carriers of contagious diseases are allowed to work in easily infected places which fall into the prohibition of the State Council's health administration department;
- 4) In case of refusal to implement the prevention and control measures set by the relevant epidemic prevention department according to this law.

Article 36: If the side penalized refuses the fine imposed upon him, he may apply to the higher-level health administration department for a reexamination of the case within 15 days after receipt of the penalty notice; if

he still objects to the decision made after the reexamination, he may appeal to the court within 15 days after receipt of the decision. The side penalized may also directly appeal to the court within 15 days after receipt of the penalty notice. If the penalty notice remains unimplemented within the designated period and no application or appeal is made within 15 days after receipt of the penalty notice, the health administration department that made the penalty decision may apply to the court for the enforcement of the decision.

Article 37: Any violation listed in Article 35 of this law that may cause the spread of contagious diseases or constitute a serious danger of the spread of such diseases will be held criminally responsible according to Article 178 of the Criminal Law.

Article 38: In case personnel engaged in the experiment, storage, delivery, and transportation of contagious bacteria and toxicants violate the relevant regulations of the State Council's health administration department and their violation causes serious consequences such as spreading contagious bacteria and toxicants, they will be held criminally responsible according to Article 115 of the Criminal Law; light offenders are liable to administrative punishments.

Article 39: In case personnel or government functionaries in charge of medical protection, epidemic prevention, and medical supervision neglect their duties and their negligence causes the spread of contagious diseases, they are liable to administrative punishment; serious offences that constitute crimes will be dealt with according to Article 187 of the Criminal Law.

Chapter 7: Supplementary Articles

Article 40: The State Council's health administration department will formulate implementation methods according to this law and submit them to the State Council for approval and implementation.

Article 41: This law will come into force on 1 September. The relevant articles of the Criminal Law are attached herein.

Article 178: Those who violate the regulations on border quarantine and their violation causes the spread of contagious diseases or constitutes a serious danger of the spread of contagious diseases will either be sentenced to a prison or detention term not exceeding 3 years with a cash penalty or subjected only to a cash penalty.

Article 115: Those who violate the regulations concerning the management of explosive, inflammable, radioactive, poisonous, and corrosive materials and their violation causes serious accidents in the production, storage, transportation, and use of these materials will be sentenced to a prison or detention term not exceeding 3 years; violators who cause extraordinarily serious consequences will be sentenced to prison terms between 3 and 7 years.

Article 187: Government fuctionaries who neglect their duties and cause major losses to public property, the state, and the people will be sentenced to a prison or detention term not exceeding 5 years.

AIDS Patients Treated With Herbal Medicine
54004810a Beijing RENMIN RIBAO in Chinese
25 Oct 88 p 3

[Text] Beginning in March 1983 Zhehiang Public Health Organization Associate Professors Wang Xuao and Zhong Dajing, Associate Researcher Zhao Shuzhen and Doctor Fu Lining have been treating three AIDS patients with traditional Chinese medical techniques, medicines and an integration of Chinese and Western medical approaches. One by one investigations were carried out, histories of the disease and physical exams were gathered and three months of follow-up was done. Starting in July 1987 they selected the "AIDS Number 1 Prescription" and carried out treatment on these three patients. After nearly 1 year of treatment and research, encouraging results were obtained. The "AIDS Number 1 Prescription" had an obvious ameliorating affect on the disease situation of those infected with the AIDS virus. This method maintains the normal physiological development processes of the human body and it strengthens and adjusts the immunological condition. Its function against AIDS is such that it clearly slows or blocks the development of the AIDS virus infection. It is an effective medicine for the treatment of AIDS infection.

Specialists participating in the appraisal considered that the "AIDS Number 1 Prescription" is a medicine which can be used in the treatment of AIDS virus infection and its application promoted internationally. The Departments of Medicine and Public Health of Zhejiang and Shanxi Provinces have decided to produce the "AIDS Number 1 Prescription" at the Number 1 Encapsulated Pill Factory at Xinchang, Zhejiang Province, and the Liquan Pharmaceuticals Factory in Datong, Shanxi Province.

Traditional Medicine AIDS Research Center Planned
OW2502223789 Beijing XINHUA in English
0245 GMT 25 Feb 89

[Text] China will establish an AIDS research center which will study the use of traditional Chinese medicine in providing accurate diagnosis and treatment of the killer disease, according to a leading Chinese medical researcher.

Cao Qing, who heads China's AIDS prevention team, said that 22 people have been found to be AIDS virus carriers, of whom four are from coastal Zhejiang Province and the rest are foreigners. Three of them have been confirmed as AIDS patients and died.

The practice of importing blood-based products from foreign countries and the reappearance of prostitutes in coastal cities may have helped to introduce the disease to China, he pointed out.

In recent years China has conducted both AIDS prevention and sex education classes for students and the general public, thus heightening awareness of the problem, he said.

AIDS monitoring networks have also been set up in Beijing, Shanghai, Guangzhou, Fuzhou, Hangzhou, Xian and other large cities.

Deaths of 80 Blamed on Cholera and Typhoid
54004007 Hong Kong SOUTH CHINA MORNING
POST in English 26 Dec 88 p 7

[Text] More than 80 people have died from cholera and typhoid outbreaks in northwestern Xinjiang and eastern China since the summer, Public Health Minister Chen Minzhang said.

"There have been more than 30 reported deaths from typhoid and 55 (from) cholera," the New China News Agency quoted Mr. Chen as telling a National People's Congress standing committee meeting.

His announcement came on the same day that Premier Li Peng submitted a draft law to the congress on prevention of infectious diseases.

Diseases with a high incidence have been classified into three categories by the draft law.

Mr Chen said AIDs was not included with plague and cholera in the first and most serious category but in the second because no full-blown cases of AIDs have yet been found in China.

Official statistics showed that China has seven AIDS carriers. All the infections were blamed on contaminated blood products imported from abroad.

HONG KONG

Sixteenth Confirmed AIDS Victim Recorded *54004006 Hong Kong SOUTH CHINA MORNING POST in English 6 Jan 89 p 3*

[Text] Another case of AIDS has been confirmed, bringing the number of people who have contracted the full-blown disease to 16.

The Medical and Health Department said yesterday in its monthly surveillance report the male victim contacted the disease sexually.

Eleven of the AIDS victims have died, including one woman.

The department also said four more people had been found to be infected by the AIDS virus, bringing to 116 the number of carriers in the territory.

Up to 30 per cent of these carriers are expected to develop the full-blown fatal disease within five years.

The four new carriers include a Swiss woman, serving a 2-1/2-year prison sentence for a drug offence.

She contracted the virus through intravenous drug abuse while overseas.

The new carriers were detected among the 3,122 people tested for AIDS in November. Under the screening program, certain high risk groups, including haemophiliacs, intravenous drug abusers and sexually promiscuous people, are tested.

Among the carriers in Hongkong are 67 individuals referred by doctors, 12 referred by venereal disease clinics and 53 haemophiliacs who contracted the virus through contaminated blood before heat-treatment and donor screening were instituted in 1985.

Deported Prostitutes Called Possible AIDS Carriers *54004008 Hong Kong HONG KONG STANDARD in English 11 Jan 89 pp 1, 2*

[Article by Mark Brickwell]

[Excerpt] Two foreign women deported for working as prostitutes last year told a senior policeman they had AIDS.

The pair, from an unspecified Asian country, were working in brothels in Yau Ma Tei.

Police have warned that the women—and many others like them—might have passed the deadly disease to thousands of their customers.

Customers patronizing young prostitutes also stand the chances of contracting other venereal diseases, because of a high level of infection among such women.

The situation was so serious that all men who have visited prostitutes in the district should have AIDS tests, said Yau Ma Tei Deputy District Commander Ian Seabourne.

"The prostitutes personally told me that they had AIDS," Mr Seabourne said.

"If they were telling the truth this is very dangerous for any man who has been with a prostitute." [passage omitted]

Mr Seabourne said 1,027 foreign prostitutes had been discovered working in Yau Ma Tei in the last two years.

Malaysian, Filipino and Thai women were the most common but in recent months several South American women have also been detained. All foreign prostitutes—except those from Britain—were deported for working illegally, Mr Seabourne said.

"The women are catering for local customers and many of them take drugs using injections," he said.

"You do not have to be a professor to realize that some of these girls brought AIDS into Hongkong.

"I am not trying to frighten people but if I were a local male who had used a prostitute in Yau Ma Tei, I would go for a screening test.

"If these men are still going out with prostitutes it will not take very long for the disease to spread.

So far, 16 people have contracted the disease in Hongkong, of whom 11 have died, while a total of 116 people have been found to be carrying the AIDS virus.

Mr Seabourne said local prostitutes carried many other sexual diseases.

He said 143 girls under 16 were discovered working as prostitutes in the district last year.

"The vast majority of them willingly became prostitutes, unwittingly they did not know the dangers," Mr Seabourne said.

"Nearly 90 per cent of young girl prostitutes have venereal disease.

"We know of a 13-year-old girl who caught syphilis on the night she became a prostitute.

"They try to take precautions but either they don't understand or they become lax.

"It is rare now in Yau Ma Tei district to find a prostitute who does not carry medicine to treat some disease or other," he said. [passage omitted]

VIETNAM

Radio Reports on Rice Planting, Pests in South
BK2402063089 Hanoi Domestic Service in Vietnamese
1100 GMT 23 Feb 89

[Summary] In this year's winter-spring rice season, the southern provinces have fulfilled their transplanting plans, with An Giang, Long An, Dong Thap, and others likely to exceed the plan norms. At present, the early winter-spring rice is in the budding and blossoming stage, and the main winter-spring rice is sprouting branches. Along with tending the rice crop, the local peasants are actively preventing and controlling harmful insects and diseases.

"According to a communique issued by the Plant Protection Department, the southern provinces' winter-spring rice crop is now being ravaged by various types of harmful insects and diseases, with rice leaf rollers infesting more than 30,000 hectares in the Mekong Delta and central coastal provinces and stem borers, about 40,000 hectares in the Mekong Delta provinces. Rice blast, army worms, and stemflies are also causing damage here and there in the central coastal provinces; and limited infestations of army worms have been reported in Tien Giang and Cuu Long Provinces. In addition to this, paddy flies are playing havoc on the fields of budding, blossoming, and ripening rice plants in the Mekong Delta provinces."

To ensure a good harvest the southern provinces should concentrate efforts on controlling harmful insects and diseases and preventing them from spreading.

BANGLADESH

Incidence, Origin of Malaria, Encephalitis Questioned

54500052 Dhaka *THE NEW NATION* in English
1 Nov 88 p 55

[Editorial]

[Text] Diseases, common and uncommon, have a peculiar way of taking toll of human lives in different places and in different times, the exact reasons of which sometimes become difficult to identify. While diarrhoeal diseases have been known to break out in the wake of floods, this year the incidence of different types of fever like the viral fever, typhoid, malaria, jaundice and encephalitis is being reported from all over the country. While the exact causes of outbreak of this wide variety of diseases is yet to be precisely determined, these cannot but cause serious concern to all particularly in view of the heavy toll that encephalitis has recently taken, and is still taking in neighbouring India. The death figure there stands at 1,281 while the number of the affected is far higher. This fatal disease marked by inflammation of the brain has broken out over a wide region of India stretching from Uttar Pradesh to West Bengal. In West Bengal, Burdwan, Hoogli, Bakura and Birbhum districts are mostly in the grip of this disease.

Whether encephalitis is travelling to Bangladesh from India or where the incidence of this deadly disease here is purely of a local origin is difficult to tell. However a link between the two seems to be quite a plausible suggestion. What, however, is baffling the physicians here is the close similarity between cerebral malaria and encephalitis both of which are of viral origin. According to experts, many other types of fever with symptoms apparently similar to those of cerebral malaria do not fall within this category strictly speaking. Facilities for pathological test for malaria are limited here while those for encephalitis are nil. In such a situation the common medicines for malaria are being prescribed for all these diseases, which is a very disquieting trend, to say the least. Facilities for pathological test for malaria should be expanded on a priority basis and Japanese experts may be invited to combat encephalitis, as has been done by India where this disease has proved to be of the Japanese variety and of a highly fatal type at that.

So far as malaria is concerned there was a malaria control department in this country which was wound up in the mid seventies when the battle against malaria was declared to have been won. This country was rather snugly supposed to be malaria free so long. Recrudescence of this disease now belies that assumption and should. Therefore, shake us out of our complacency in this regard. Perhaps, there is no such thing as complete victory so far a fight against diseases is concerned. A disease can perhaps be controlled or made curable but not banished forever. The incidence of malaria warrants

a fresh battle against mosquitoes along with other cleanliness drives and encephalitis demands the highest alertness on the part of our health department both with regard to its diagnosis, prophylaxis and treatment. The quick death caused by cerebral inflammation demands a concomitant cerebration by our physicians and health authorities.

Puzzling Fish Disease Widespread

54500054 Dhaka *THE BANGLADESH OBSERVER*
in English 19 Dec 89 p 1

[Text] Amidst reports of widespread fish diseases from many parts of the country, the causes of the disease and its effects on human bodies, if consumed, have not been fully explained.

Confusion prevails among the buyers if consumption of fish is harmful. In city markets, many buyers were seen scared during this correspondent's visit to the fish market. Adequate explanation was felt necessary to remove this confusion. A few days back, the government issued a press note only to contradict a report published in a section of the press to the effect that many people had died after consuming diseased fishes. In an earlier one, the authorities admitted the outbreak of fish disease and said that eating of diseased fish is not harmful but should be avoided.

A survey of city fish markets suggests that the supply of different varieties of fishes is not abundant as compared to last year's supply during this time. The prices are not prohibitive but at the same time not cheap. Some fish traders said that many fishermen lost enthusiasm of fishing due to the outbreak of fish disease. The buyers seemed more interested to buy fresh small-size fishes than the larger ones. According to some of the buyers, it is less harmful to consume small fishes. The large-size fishes like shoal, boal, rui and pangash, etc. might have carried viruses, they argued.

The secretary, ministry of fisheries and livestock told this correspondent on Sunday that ulcerative syndrome which was broken first in Australia in [word indistinct] in an epidemic form has hit many countries of the world so far including Malaysia, Indonesia, China, India and Thailand. Bangladesh has of late been affected by the disease and the causes of the disease are being investigated. He said, to identify the causes, one British expert, Dr Roberts, was brought into the country.

Investigation was carried out in the affected ponds and lakes and the diseased fishes biologically examined. A task force headed by Dr Asadur Rahman, Vice-Chancellor, Agricultural University at Mymensingh has been assigned to investigate the causes of the disease. The task force has directed the upazila and district fishery officers to report the cases of fish disease immediately. The task

force's findings are yet to be published. The experts, however, recommended that limestone should be administered into the pond water to prevent outbreak of the disease.

The director, Department of Fisheries told this correspondent that if the diseased fish are washed by salt water, the disease can be cured. He said that the fisheries research institute in Mymensingh will test the samples of the diseased fishes collected from the affected areas and identify the causes as assigned by the task force.

Meanwhile, a three-member team formed by the Central Institute of Fishery Education, Bombay has found that the fish disease called 'epizootic ulcerative syndrome' is not harmful to human bodies. The Indian team submitted the report amidst widespread fish disease throughout India. Publication of such reports in the context of Bangladesh has become important, informed circle believes.

INDIA

Health Ministry Begins Program To Fight AIDS 54500056 Bombay THE TIMES OF INDIA in English 13 Jan 89 p 8

[Text] The Union health ministry has embarked on a programme to set up fullfledged treatment facilities for patients suffering from AIDS in medical college hospitals.

The programme, at a cost of Rs 1 crore, comes amid reports of gradual and steady rise in the number of seropositive AIDS cases in the country, according to official sources.

Under the action plan prepared by the ministry, medical college hospitals will soon become the focal point for management of AIDS cases.

While the number of seropositive cases which could lead to full blown AIDS has risen to 658 by December 31 last year, the number of fullblown cases remained almost stationary at 27 including four of indigenous origin.

The World Health Organization (WHO) has reportedly pointed out to the Union health ministry that the number of seropositive cases could be much higher considering the limited number of persons presently being screened. So far, only 183,000 people belonging to the high-risk groups have been screened for possible presence of AIDS.

The number of undetected seropositive cases could run to several thousands in the country as screening is currently confined to urban areas.

The sources said that in order to tackle the possible rise in seropositive cases, the ministry has formulated a three-pronged approach, including an action plan to

treat AIDS cases, mandatory testing of blood to be introduced in blood banks in phases and training of hospital personnel in management of AIDS cases.

As a first step, the government proposes to set up AIDS treatment facilities at the Madras Medical College, J.J. Hospital, Bombay, and the All-India Institute of Medical Science, Delhi in the next month. All six-bed units in the institutes will have two exclusively reserved for terminal cases.

Other centers at Lucknow, Trivandrum, Hyderabad, Jaipur, Calcutta, Srinagar and Cuttack will have similar facilities before the end of the year.

The directorate of health services has drawn up an elaborate scheme to train medical personnel in the clinical management of AIDS. Persons trained in Australia will be deployed for this purpose.

The concern over seropositivity rates among blood donors stems from the fact that blood transfusion has been shown to be the most effective method of transmission of infection with transmission rates ranging as high as 90 per cent.

To minimize this, the Central government has made it mandatory that all imported and indigenously manufactured blood products carry an "AIDS-free" certificate.

The AIDS task force of the central government which reviewed infection of the disease through blood had recommended in May last screening at select metropolitan centers and results analyzed. As a result, the screening of blood was started in select institutions in Vellore, Madras, Pune, Bombay and Delhi.

The Central government will launch by April this year a five-year medium-term plan with a possible outlay of Rs 10 crores to evolve long-term strategies to control the spread of the disease.

The plan is now under preparation in collaboration with the WHO after consulting various state governments. A team of WHO consultants and Union health ministry officials visited some problem states during the past two months to assess their requirements.

Cerebral Malaria Reported Spreading in Gujarat 54500055 Calcutta THE TELEGRAPH in English 10 Dec 88 p 5

[Text] The death toll in the mysterious fever which broke out in Gujarat's Mandal village has risen to 170. The fever, which has been identified as cerebral malaria, has also spread to nearby villages. Over 700 cases have been registered in 11 villages of Viramgan taluka of Ahmedabad district so far.

Efforts are on to bring the epidemic under control. A number of medical teams have been sent to the taluka, while some voluntary bodies are also helping out.

According to health officials, the epidemic broke out at the end of September. By the end of October, the public health centre at Mandal had the epidemic under control. However, the only doctor at the centre went home for Diwali and there was no medical help for the area for nearly 10 days. During this period the epidemic assumed catastrophic proportions.

DDT has been sprayed in the locality in order to check infestation of mosquitoes. However, the paddy fields with stagnant water are a breeding ground for more mosquitoes.

Health officials believe that the virus causing cerebral malaria may have been brought to Ahmedabad district by diamond polishers working in Surat. Many of the village people work in Surat and there is constant interaction between the two.

The BJP has claimed that the toll was higher than 500, particularly because many people go to private clinics and no record is kept of these cases. The BJP office-bearers who visited the locality yesterday, said at the Bhojawa village nearby, with a population of 3,000, nearly 150 people had died of cerebral malaria. The party blamed the government for the calamity, alleging that it had been "very slack in providing preventive measures and allowed the epidemic to rise." It urged the government to announce an exgratia payment of Rs 25,000 to the families of every victim and Rs 10,000 to families of every adult child victim.

The BJP has also demanded a public apology from the state health minister, Mr Vallabhbbhai Patel, for casting aspersions on the villagers by his statement that the epidemic had proved fatal because the people of Mandal were superstitious.

JORDAN

Experts Discuss AIDS Epidemic

54004506 Amman AL-DUSTUR in Arabic
1 Dec 88 p 10

[Article: "AL-DUSTUR Panel Discussion: AIDS, Plague of the Times. Panel Moderated by Nabil 'Amr"]

[Excerpts] Today, mankind looks back on the most dangerous disease of the 20th century threatening the lives of millions of people: the AIDS disease of our time.

Today, 1 December, International Anti-AIDS Day, we have the right as Muslims and Arabs to be proud of our morality, our customs, our traditions, and our values

that restrict, indeed prevent, the spread of such a dangerous disease in our midst. Scientific evidence shows that this disease is spread through homosexual activity, which is a disease in itself.

Hence, the equation becomes clear. The more people avoid homosexual activities and fornication, the safer they are from AIDS. This compels us to fall back on the cultural concepts and moral fortitude we inherited from history and religion, not only to protect ourselves from AIDS, but because such values protect the human race, elevate it to new heights and maintain it as God Almighty meant it to be.

On this occasion, the AL-DUSTUR panel discussion on AIDS hosted the following persons: Dr Hani Shammut, director of the Jordanian National Anti-AIDS Program; Dr Janet Mirza, director of the Central Blood Bank of the Ministry of Health; Dr Bassam Hijawi, infectious diseases specialist at the Ministry of Health; and Mrs Muna Hamzah al-Nasir, president of the Health Education Division in the Ministry of Health. Mr Hazim al-Khalidi of the Ministry of Health took part in preparing for this panel discussion.

[AL-DUSTUR] As we welcome the distinguished panelists, we would like to begin by informing AL-DUSTUR's readers about the AIDS disease.

[Dr Shammut] [Passage omitted] It has been determined in the United States that 66 percent of the cases are caused by homosexual activity. Transfusion of AIDS-infected blood causes AIDS in 100 percent of the cases, as is the case in Jordan where the majority of cases had blood transfusions during surgery performed abroad.

America and Europe suffer from the widespread use of drug syringes and tattooing instruments which, if not properly sterilized, can help transmit the virus.

If the mother is an AIDS victim or carrier, she may transmit the virus to the newborn baby in 40 percent of the cases before birth or during delivery. There is no scientific evidence that the virus is transmitted from mother to baby through nursing.

Most AIDS victims in Jordan, about 9 children, have received blood factor 8, plasma, to treat their hemophilia. That was in 1983. Since then, we have controlled this imported factor by testing it for the AIDS virus before giving it to hemophiliacs.

[AL-DUSTUR] How many cases are there in Jordan?

[Dr Shammut] There are 17 cases, 80 percent of which have been contracted through blood transfusions abroad and 20 percent through sexual contact.

While the Ministry of Health can control the blood supply in Jordan and imported blood compounds, the fear lies in sexual contact, especially by those who travel abroad for one reason or another.

[AL-DUSTUR] The ball is now in the awareness-raising court, in the health education court.

[al-Nasir] True. Since no cure and no vaccine has been discovered for the serious AIDS disease, the only available way is awareness-raising and education. Hence, we have devised an educational workplan based on WHO guidelines and suited to our social situation, especially since our problem lies in students, expatriates, and those who travel abroad for tourism or work.

Our program includes coordination with the Ministry of Education to reach high school students, a large number of whom will go to study abroad. We have to arm them with the strongest weapons of knowledge about the dangers of this disease. The Ministry of Health has prepared medical cadres to tour the kingdom, meet with student and youth groups in particular, and explain the magnitude and dangers of the spread of such an epidemic. We have held a number of training courses for medical and health cadres in cooperation with the National Anti-AIDS Committee and are in the process of working with the Ministry of Religious Endowments to ask mosque preachers to devote a part of their sermons to talk about this dread disease.

And whereas we are asking the people to be aware of this bitter reality, we are getting good support from the mass media, the press in particular, in publishing data on this hellish epidemic.

[Dr Shammut] (interjecting) While the Ministry of Health can protect society in certain respects, such as using safe blood and monitoring patients, affirmation of our moral values, which are basically guaranteed by the Islamic religion and inherited customs and traditions, require all appropriate authorities, such as the Ministry of Education, the Ministry of Higher Education, the Ministry of Religious Endowments, the Ministry of Youth and other popular sectors, to join forces in this regard.

[AL-DUSTUR] This discussion indicates that the danger in most cases comes from abroad?

[Dr Shammut] That is true. We must be more candid and must advise our children that any illicit sexual contact, which is rare in our country and widespread abroad, may bring death due to this epidemic.

While some prostitutes in the West and America carry "AIDS-free certificates," this does not mean anything because this certificate proves that they were free of AIDS at the time of the examination, and there is no

guarantee that the virus was not contracted in between the examination and the sexual contact. That is why I am sounding the alarm about involvement in illicit sexual contact.

[AL-DUSTUR] How much control does the Central Blood Bank in Jordan have over local blood transfusions and imported components?

[Dr Mirza] As the brothers have already said, sexual contact is the major cause of the epidemic and this requires awareness.

I am happy to say that Jordan is among the first countries to become aware of the blood transfusion problem. It has brought this process under total control by using modern laboratory testing techniques prior to transfusion.

If the blood is even suspected of being infected or is found to contain AIDS-bearing bodies, it is destroyed and proper action is taken vis-a-vis the blood donor. In the meantime, we have restricted blood transfusions to emergency cases.

Blood banks in Jordan hold health interrogations with blood donors to ascertain previous illnesses such as jaundice, syphilis, and other diseases, and whether the donor had surgery abroad. Blood donated by such people is subject to meticulous testing.

And while we do not extract factor 8 used for hemophiliacs in adequate amounts, we hope that, with the people's cooperation and understanding of the importance of blood donations, we will be able to provide blood banks with greater supplies to extract adequate amounts of this factor locally to meet our needs.

[AL-DUSTUR] Let us go back to the subject of health education and the awareness programs that have been devised.

[al-Nasir] Besides what has already been mentioned, we have prepared bulletins based on WHO guidelines for distribution to high school students, community colleges, universities, youth groups, clubs, and travelers. Our attention seems to be tilted toward the youth because this disease mostly afflicts people between the ages of 18 and 45, and raising the consciousness of this segment is a key national duty. On this International Anti-AIDS Day, when an international meeting is being held in Geneva, attended by a large number of world leaders and celebrities to trade news and exchange information and expertise, people are asked to adhere to moral standards and observe preventive measures.

Jordan will join the world on this day with an education and awareness campaign and courses and lectures aimed at dotting the i's and crossing the t's regarding the dangers of AIDS and its causes which, as already mentioned, are largely due to illicit sexual contact, homosexuality in particular.

[AL-DUSTUR] How pandemic is AIDS, and what segments of the population are more susceptible than others?

[Dr Hijawi] This epidemic strikes people of all ages, young and old, and males and females.

[AL-DUSTUR] As we ask God Almighty to spare us from this dread disease, we notice that going back to God, to the Islamic religion, and to our inherited Arab Islamic customs and traditions is a sure guarantee for warding off this evil disease.

[Dr Shammut] As we support this perception by the esteemed AL-DUSTUR, which is participating with us with the most important awareness campaign on this international day for combatting AIDS, we must realize that AIDS is a very delicate and sensitive subject and not anyone can express an opinion about this disease.

We have noticed that some people have written books about AIDS, keeping in mind that they have nothing to do with science and medicine. They got their information through bulletins and information they heard, thus compelling the Arab health ministers to call for the creation of technical and scientific committees in every Arab state to be in charge of publishing information and keeping up with this dangerous epidemic.

We are truthful in Jordan when we talk about AIDS information and existing cases. But people must not resort to bickering in talking about this epidemic to the point of going to the Ministry of Industry and Trade to patent so-called AIDS cures.

Therefore, we ask the press and the various mass media to follow scrupulous and scientific standards in publishing information about this dangerous and delicate epidemic.

[AL-DUSTUR] What progress has been made in international scientific research to discover a cure or a vaccine for this dangerous epidemic?

[Dr Shammut] The last cure that has been invented does not kill the virus but prolongs life. It has to be used the rest of the patient's life. It is very costly, an average of \$20,000 a year, and has major side effects on the liver. We used it once in Jordan on a patient who died.

WHO does not recommend use of this cure, bearing in mind that expected cures will not come out before 1993. Until scientists discover a cure for this serious disease, prevention, and health education are the only way. [passage omitted]

[AL-DUSTUR] What is the medical attitude toward AIDS patients and how are they treated?

[Dr Mirza] We stand by patients through humane treatment, kindness and advice.

[Dr Shammut] We call our patients the "innocent AIDS patients," in particular the hemophiliac children who contracted the disease through factor 8 transfusions.

While we publicize the number of cases we have, we keep the names strictly confidential. We deal with them by educating the parents and by keeping constant watch over them.

[AL-DUSTUR] Are AIDS patients quarantined?

[Dr Shammut] Since AIDS is not transmitted via food, drink, or washrooms, but via sex and blood, we in Jordan do not quarantine the patients so long as they are not sexually active and do not donate blood. Job applicants, including foreign workers, are not required to present an "AIDS-free certificate."

Precautions Against Spring Invasion of Locusts Described

54004516 Amman JORDAN TIMES in English
11 Jan 89 p 3

[Text] The Ministry of Agriculture has announced that teams involved in fighting locusts in south eastern regions of the country have eliminated all swarms that invaded the Kingdom in the past month and that the invaded areas are now completely free of the dangerous pests.

But the announcement warned that the locusts were expected to return to the country in the early spring as projected by the UN Food and Agricultural Organisation (FAO) which said that locust danger was expected to haunt the Eastern Mediterranean and North African regions for at least four or five years.

The ministry's announcement called for concerted public and private efforts and organised plans for combating the pest and confronting future threats to the country's vegetation.

The ministry said that its teams, which closely maintained cooperation with the Armed Forces, the Royal Jordanian Air Force and the Badiyah (desert) Security Forces in eliminating the locusts, will continue to pursue such collaboration that should include other government departments and public institutions.

To attain this end, the announcement noted, the Kingdom has been divided into two main zones where responsibilities will be defined for each of the parties involved in the locust-combat operations.

The first of these zones extends from Wadi al-Azbah in the west to the south and south east and east encompassing all of the desert regions in Jordan. This zone it added will be under the responsibility of the Ministry of Agriculture in cooperation with the Armed Forces and the Desert and Border Police Forces since it is the main area exposed to locust invasions coming from neighbouring states, and because it is a desert region away from densely populated areas.

The second zone includes the rest of the territories in the country which will be under the direct supervision of provincial governors in cooperation with public and private organisations and population settlements.

At least three main waves of locusts invaded the south and south eastern regions of the country after crossing over from Saudi Arabia.

The Ministry of Agriculture organised the fight in the affected areas which were visited by His Majesty King Husayn and His Royal Highness Crown Prince Hasan at the height of the invasions.

The ministry's statement said that it was continuing to monitor the situation along the border areas and coordinating its actions with neighbouring countries and FAO in the fight against the locusts.

OMAN

Progress in Vaccination Drive Reported

54004518 *Muscat TIMES OF OMAN* in English
19 Jan 89 p 13

[Article by Bala Menon: "Great Progress in the Vaccination Drive"]

[Text] The incidence of notifiable diseases in Oman recorded a sharp fall in 1987, compared with the previous year, testifying to the success of the preventive services of the Government.

According to the Annual Statistical Report for 1987, released by the Directorate of Planning and Follow-up of the Ministry of Health, the country's vaccination programme had registered great progress in recent years.

"By the end of 1987, some 85 per cent of children were vaccinated against major diseases like tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis and measles," the report said.

The Ministry also widened its preventive net during the year, taking in the regions of Wadi Bani Kharus, Quraytain and Ra's al-Ru'ays, in addition to primary health care units at Khatmat Malahah and Filaj al-Mushayikh. A Mother and Child Health Centre was also established in al-Sib.

"Thus at the end of 1987, there were six public health compounds, 53 public health units, five Mother and Child Health centres, four primary care units and 11 malaria control units in the country".

Screening

The main features of the preventive programme are immunisation and screening of all children under two years of age and all females of child-bearing age, visits to distant communities for monitoring results and registered the six common childhood diseases. In addition, the National Health Programme office of the Department of Preventive Medicine also has the responsibility supervising the diagnosis and treatment of tuberculosis.

In 1987, 616 new cases of TB were registered, compared with 700 in 1986 and 861 in 1985. Chest x-rays during the year totalled more than 108,000 and the report said the programme continued to streamline the registration system and recorded dramatic improvement in the 'defaulter recovery rate'.

One of the successes of the department has been the Prevention of Blindness Programme, which was launched to combat trachoma, one of the main public health problems in the country. The report said the disease is endemic in northern Oman and some six per cent of people in this area have some sort of eye problem.

Tracking

The programme envisages tracking down patients and the main methods used are a comprehensive school screening programme and a community-based screening programme. During the 1987-88 academic year, more than 107,000 children in 431 schools were examined and some 20 per cent of them were found to be affected. More than 2,000 children were prescribed glasses and the others treated with drugs.

Seven teams of health visitors also made the rounds of areas in Nizwa, Sumayl, Al-Hamra, Rustaq, Sur, Musana'a and Suhar. The teams examined 33,003 people in 123 villages and Ministry ophthalmologists carried out 384 eyelid operations.

The campaign against malaria continued to be one of the major activities of the health authorities. Eleven malaria control units were operational in 1987 and 47 malaria control teams attached to public health compounds and public health units were also active, the report said. The programme employs a total of 141 technical staff and 343 support staff.

The programme conducted surveys in 506 villages and identified 44,673 breeding sites of anophales mosquitoes. Spraying operations were then initiated which provided protection to more than 34,000 people.

Benefits

The main vector control measure was, however, larvicidal operations, which provided direct benefits to more than 600,000 people. The year also saw detailed larval surveys of 62 Governorates in the five epidemiological regions of the country and a total of 53,044 breeding places were identified.

Malaria cases detected amounted to 15,437 from a total of 240,551 blood smears tested by the authorities. This meant a slide positivity rate of 6.4 per cent.

The incidence of the disease has shown a progressive decline over the years, indicating the in-built success of the programme.

Other public health activities, which contributed directly to the general well-being of the population included the School Health Services (visits to 922 schools and examination of 21,924 students), and Environmental Health Services (visits to 3,300 locations and launching of 24,572 environmental health campaigns in the Interior, including inspection of markets, slaughter houses and water reservoirs).

Tests

The Bacteriological and Chemical Laboratories tested 1,781 food and 6,250 water samples, inspected water tankers and conducted blood and other tests of food handlers. Quarantine activities of the department are conducted through seven checkpoints at different entry points in the country. In 1987, the port health units inspected 1,504 vessels, the airport units checked 7,330 planes and vaccinated 1,882 persons against cholera and 1,172 against yellow fever.

More than eight million food packets were also checked at the different entry points. "A review of the overall health situation during 1987 reveals significant improvement in the health status of the population. The Expanded Programme of Immunisation has been successful in reducing significantly childhood morbidity and mortality due to major infections.

"The successful implementation of the special programmes has also cut down morbidity due to most other communicable diseases. As in the recent past. The country remained free from all quarantinable diseases", the report said.

SAUDI ARABIA

Locust Findings Assessed, Warning of New Invasion Issued

54004517 Jeddah ARAB NEWS in English 9 Jan 89 p 2

[Article by Javid Hassan]

[Text] The Agricultural Research Center, Jeddah, of the Ministry of Agriculture has alerted all its branches in the Kingdom against a possible locust invasion from east and north-west Africa in May, since a rapid incubation has been underway in that region.

The forecast fits in with the data provided by GULF-NET of the King 'Abd-al-'Aziz City for Science and Technology (KACST). According to it, the Anti-Locust Research Center, London, which conducted studies in May 1955 on weather systems affecting movements and breeding of the desert locust, *Schistocerca gregaria*, concluded that locust swarms originated in the area around northern Red Sea during May and June and moved southwestward from northwestern Saudi Arabia to Egypt from Sudan, "even though ships report wind directions that are almost always either northwesterly or southeasterly."

In response to queries sent by ARAB NEWS from Riyadh, the research center said the western coasts of the Kingdom had been invaded by red and mixed locust swarms from eastern Africa on Oct. 13 last year. Huge swarms of red locusts were also sighted over Jeddah. "The Kingdom had not been exposed to such massive invasions during the last 28 years," the center said in its dispatch, and estimated the number at 350 swarms of red and mixed locusts.

Some of these swarms, it said, had been sprayed with insecticides and wiped out. The others winged their way to 'Asir and Hijaz mountains. "Combating teams were able to devastate some of these swarms at accessible areas. The rest flew into rugged mountains for incubation in suitable areas. However, the hoppers which grew in November were also destroyed."

The center said 20 aircraft and helicopters sprayed half a million liters of insecticides over one million hectares of land, while 50 ground teams equipped with spray machines were deployed in areas inaccessible to aerial action. The growth in the locust swarms, according to the center, followed wet spells in Qunfudah, al-Ta'if, Jizan, 'Asir, al-Bahah, Medina, Amlaj and Tabuk areas.

The region between Qunfudah in the north and the Yemens down south spread over an area of 25,000 square kilometers provided suitable environment for the incubation of locusts. The area between Jeddah in the West and Tabuk, al-Jawf up north were also fertile breeding grounds for locusts, especially after rains.

Besides rainfall, certain food plants growing in the Kingdom also had their impact on the development, maturation and fecundity of the desert locust, according to another study conducted by the Center for Overseas Pest Research Center, London and the Locust Research Station of the Ministry of Agriculture (Jeddah). Some cultivated species of plants, such as *Pennisetum typhoides* and sorghum and the uncultivated *Dipterygium glaucum*, *Panicum turgidum* and *Zygophyllum simplex* were common in locust habitats and have been known as, or suspected of being, important food-shelter plants for locusts.

The plants *Pennisetum*, *Dipterygium*, *Tribulus* and *Chrozophora* have been shown to support the rapid growth and development of those pests, while a pure diet of sorghum retards their normal growth. It was also noted that locusts fed on sorghum were of red hue, while those consuming other varieties had a mixed color.

Another significant finding was that *Panicum*, a dominant plant over large areas of the Tihamah, was only occasionally or rarely eaten by the locusts which were unable to ingest enough nutrients and water from the tough and dry leaves of the plant.

Legal Aspects of Fight Against AIDS Discussed
18000352b Minsk SOVETSKAYA BELORUSSIYA
in Russian 6 Jan 89 p 3

[Article by A. Babin, chief of the AIDS Prevention Division at the Republic Center of Hygiene and Disease Control, Ministry of Health of the Belorussian SSR: "AIDS Terminates Life"]

[Text] What measures are taken to prevent the spread of this vicious infection, what should be done in order to further reinforce the obstacles in its path—these are the topics considered by the author of this article.

As of now, 112 Soviet citizens are known to have contracted the AIDS virus. In the opinion of specialists, this is only the tip of the iceberg; actually, the number of persons infected is much higher. Over the last year, 1988, the number of persons infected grew 3.5 times compared to the end of 1987.

Infection is brought from abroad both by foreigners and Soviet citizens on business trips abroad. So far, this is the main way, but the number of those infected by their fellow countrymen is increasing from one month to the next.

The infection has not spared our republic. Over 1.2 million persons have been tested for AIDS. Twenty-nine foreigners infected with the AIDS virus have been found, and the contraction of this virus by seven citizens of the republic, including four in Minsk, has been ascertained. The actual number of those infected is much higher; simply put, they have not been discovered yet by the health care agencies.

Prostitutes and other persons with a chaotic sex life are the most dangerous group as far as spreading AIDS is concerned. What is the status of testing them? How many of them are there? Nobody is in a position to give an exact answer to this question. There are especially many of them in areas which include Intourist facilities, dormitories of foreign specialists; however, such persons are not officially registered anywhere. What are the physicians to do? We have taken the way of setting up offices for anonymous testing. However, it quickly turned out that persons infected with AIDS continue to remain anonymous and infect their partners with AIDS. We began to set up offices of confidential testing (at present, there are 11 of them in the republic). Complete medical confidentiality of the testing is maintained. Any citizen of any administrative unit may take the test, be it in Minsk, Vitebsk or another city of his choosing. Then he can call and ask about the results. It is recommended that persons in the high-risk groups get tested every 3 months and subsequently once in 3 months over a quite long period of time. There are observations suggesting that AIDS-positive results do not appear until 1.5 years later.

Internal affairs agencies could be very helpful in discovering and testing prostitutes, homosexuals and other persons—carriers of AIDS who are socially dangerous. Unfortunately, they do not always refer suspects for testing to treatment and prevention facilities. Legal issues are the bone of contention. Last year, 60 homosexuals were tested, only convicted homosexuals, and we do not know how widespread this is. There are thousands of suspects. In the United States, where homosexuality is not punishable by law, there are about 2 million male homosexuals, i. e., about 1 percent of the entire population. It is up to the lawyers to decide whether it is possible to legalize these persons in our country. As far as health care employees are concerned, it would be better for these persons to be under medical observation, because, according to data from the foreign press, they are the main source for spreading the infection in some countries. In the United States, AIDS appeared among the homosexuals, and only later began to spread through natural sexual intercourse and the blood of donors.

Sex education of young people is an acute problem in AIDS prevention. A bigoted attitude to the "forbidden topic" on the part of leading educators and even health care employees has brought about "instruction" by those who hold sway in the yard and in the street. In their system of values, it is not shameful to have intercourse at 14 or 15, or even earlier. At that age, the fear of contracting venereal disease is absent, and there is no idea at all of hygiene in sex. If neither the school nor the parents can keep them from premature involvement, we should at least make sure that those do not become fatal. Pregnancy can be terminated, whereas AIDS terminates life.

Massive testing of the populace for AIDS is stifled by the shortage of special equipment (spectrophotometers) for analyses. Domestically manufactured equipment has not been delivered thus far, whereas imported equipment is expensive and, as is known, is purchased for hard currency.

Space meeting the requirements of sanitary and hygienic norms and disease control rules is needed to set up diagnostic AIDS laboratories. Out of necessity, some of the laboratories were set up in adapted dwellings, and the sanitation and disease control service is suggesting that they be closed. Within the next 2 years, 25 to 30 more laboratories have to be created. Additional space is needed, especially in rayon centers.

How should we treat AIDS-infected persons? They should live among us, and not only live but be full-fledged citizens, go to work, to entertainment facilities, swimming pools, etc. Any discrimination of them is inadmissible. In our country, there have already been cases of them being dismissed from their jobs under various pretexts. Exactly the opposite, more sensitive and attentive attitude towards them is needed. Not all of them are debauchers; there are those who have suffered through no fault of their own, say, during a blood transfusion.

There are children who have contracted the disease from their mothers or through blood transfusions (according to the data of union statistics, so far there are no infected children in the republic; no cases of infection through blood transfusions have been found either; all donated blood is tested thoroughly). In the health care service, measures are taken to ensure that information on AIDS-infected persons does not leave the confines of the health care facility. Only the management, the ward physician and the infection control doctor, i. e., officials, should know about them.

Every AIDS-infected person, including foreign citizens, gives a signed statement to the effect that he has been warned about criminal penalties for spreading AIDS (as is known, the ukase of the USSR Supreme Soviet Presidium dated 25 August 1987 provides for 5 years of imprisonment). They are issued leaflets with a list of measures which are bans (to donate blood, to hand over instruments used, including manicure sets, to another person, mandatory use of condoms, etc.). Compliance with the bans ensures that they will not give the disease to those around them because the AIDS virus is not spread through handshakes, dishes, household items not soiled with their blood, air, water in swimming pools and insects.

The more knowledgeable every citizen is about AIDS prevention, the more responsible his attitude toward his own health and way of life is, the less the probability of contracting the horrible virus.

Enquiry Into AIDS Outbreak at Elista Hospital Continues

18300352A Moscow TRUD in Russian 16 Feb 89 p 4

[Article by V. Belitskiy, TRUD science editor: "Those Guilty Have Been Fired; Problems Remain"]

[Text] The case in Elista where 27 small children were infected with the human immune deficiency virus [AIDS] as a result of criminal negligence of health care employees who used non-sterilized instruments is an extraordinary one, all the more so because the above number is not final.

A commission chaired by Deputy Chairman of the RSFSR Council of Ministers Nikolay Timofeevich Trubilin has carefully examined both the causes of this event, so to say, at the level of the medical collective, as well as issues directly related to the overall level of medical aid and organization of health care.

As far as the facts of the first group are concerned, they are generally simple and even commonplace, the tragedy notwithstanding: low level of skill of both the physicians and middle-level personnel, the lack of enforcement of mandatory rules of hygiene, botched work, irresponsibility... After the event became public, some of the medical documentation turned out to be ruined or disappeared. Let us hope that the documents remaining will suffice for

the investigation to determine both the specific culprits and the exact picture of the crime. Questions may be asked about the propriety of using the words like criminals and criminal negligence before the court rules. At the meeting of the commission which, incidentally, was attended by representatives from different agencies, including law enforcement, it was said that no other conclusion could be drawn on the basis of materials collected by competent specialists in Elista. It is another matter that specific criminals will have to be determined by the court. At that point, we will be able to tell our readers about them.

As far as the facts of astounding carelessness on the part of physicians and health care administrators which were revealed in Kalmykia and an astounding lack of demands to comply with recommendations for fighting AIDS on the part of services of the Ministry of Health of the RSFSR, they have been found to be incompatible with the positions held by a number of employees, beginning with chief physician of the republic hospital for children M. Manzhieva to Minister of Health of Kalmykia L. Tapkin and Deputy Chairman of the Council of Ministers of the Republic K. Maksimov. Some managers and members of the board of the Ministry of Health of the Russian Federation were held accountable.

However, it would be naive to think that only the physicians are guilty of what has happened. Preventing an AIDS epidemic in our country is a complex sociopolitical, cultural and educational task to which practically every ministry contributes its part. For example, we have been talking for months about the need for businesslike contacts between physicians and internal affairs agencies. After all, it is nonsensical to assume that doctors would hunt down persons belonging to "high-risk groups"—drug addicts, prostitutes, and so on—in their hangouts and basements. It is clear that an arrangement different from the one in place is needed for working with them, registering them and checking on them. So far, the matter has not advanced beyond negotiations. Here is another aspect of the problem: there are statutes envisaging penalties for spreading AIDS. However, as was stated at the meeting, the office of the prosecutor of the republic still does not monitor compliance with the Decree of the Presidium of the USSR Supreme Soviet adopted in 1987 very much. The very legal foundations for fighting AIDS need to be revised. For example, at present people who have worked abroad for a long time are not classified as a "high-risk" group for some reason.

Particular responsibility devolves on industry which produces, or rather fails to produce, the instruments and equipment needed for AIDS prevention. TRUD has written many times about the resourcelessness of the Ministry of the Medical and Biological Industry and the Ministry of Instrument-Making, Automation Equipment and Control Systems which have failed the government assignment, failed to organize the production of disposable syringes and needles for injections, an adequate

quantity of reliable testing kits and equipment for outfitting diagnostic laboratories. Yesterday, statistics were quoted: the minimal need of the RSFSR for such laboratories is 640; however, at present there are only 163 of them due to the absence of spectrophotometers which these ministries have failed to deliver.

Bureaucratism, lack of initiative, lack of organizational skills which have, unfortunately, become characteristic features of operations by many sectors in our country, and also of the entire economic mechanism, are clearly seen in the case of the approach to the production of disposable syringes and systems. The government assignment for them was given as long as 2.5 years ago. However, little has been accomplished over this actually long time. Speaking at the meeting, Minister V. Bykov stated: "There are going to be no syringes if there is no equipment," and referred to poor work of the Ministry of the Machine Tool and Tool Building Industry which supposedly paralyzes operations at the enterprises of the Ministry of the Medical and Biological Industry headed by him. What is needed to get things moving? Hard currency, of course! As much as 100 million.

It appears that now, when procrastination is fraught with new and extremely unpleasant consequences, we probably cannot do without purchasing equipment abroad (it

is no accident that President of the Academy of Medical Sciences of the USSR V. Pokrovskiy said at the meeting that new outbreaks of the virus may be expected in other places as well). However, we should treat optimistic assurances by the Ministry of the Medical and Biological Industry (as well as the Ministry of Instrument Making, Automation Equipment and Control Systems), which have been made many times, with a lot of caution. The ministry did produce 30 million syringes last year...without needles! Supposedly, the needles were to be supplied by the Ministry of Instrument Making, Automation Equipment and Control Systems. The latter was understandably facing an extremely tough technical situation because it had to solve a problem already solved by other countries as recently as 10 or 15 years ago.

The Ad-hoc Commission of the RSFSR Council of Ministers went into details, evaluated and discussed various measures of aid to the health care service in Kalmykia, and adopted a plan of urgent and long-range measures for the republic. Of course, this is good. However, let us remember that the problems brought into the spotlight by the Elista accident are not solved at meetings. They only hinge on how knowledgeable and honest people are in approaching their professional and human duties.

DENMARK/GREENLAND

Growth in AIDS Cases Shows Signs of Leveling Off

600-700 New Cases in 1990

54002455a Copenhagen BERLINGSKE TIDENDE
in Danish 2 Dec 88 p 18

[Article by Tor Norretranders: "Number of AIDS Cases Not Sky High"; words in italics as published in original]

[Text] Epidemiology. AIDS is not spreading as rapidly among the Danish population as before. A number of the prognoses that had been made are exceedingly pessimistic. It is now clear that the fear of an AIDS epidemic has been exaggerated.

The AIDS disease has been surrounded by totally unrealistic expectations of both hope and fear. The reason for that is simple: AIDS is the first major new infectious disease that has hit the industrialized countries in this century. AIDS has reminded the world that infectious diseases have not disappeared for good.

At the same time, AIDS has appeared in the industrialized world which *believed* that it had medication and other technical interventions that eradicated infectious diseases. But the fact is that only a small portion of the honor of eradicating infectious diseases can be ascribed to doctors and the pharmaceutical industry. The major infectious diseases were in fact on their way out when vaccination programs were initiated and healing substances such as penicillin were discovered.

The consequence of this lack of historical insight has been that people have exaggerated the hope of a technical solution of the AIDS problem: The belief has been that a vaccine would be discovered. That is why people have also been able to live with the idea that predictions indicated that there would be many cases of the disease in the future. This has been done even if these predictions are based on preconditions that have never come to pass and therefore cannot be expected to hold in the AIDS case.

This dual historical memory displacement—the hope for vaccines and the fear of massive spread among the general population—has at the same time been handy for many groups in society. The press got an excellent combination of sex, death, and fear of death. The doctors got a disease that made cutbacks inconceivable. The moralists got the opportunity to preach what they would have preached anyway, although hardly with that large an audience.

But it now becomes constantly more and more obvious that this was an error of judgment which could have been possible to avoid.

Exponential growth has become a kind of symbol of our times. This galloping growth, which escalates as time goes on, has in the postwar era characterized such various conditions as the amount of oil consumption, the number of telephones, the size of scientific instruments, the gross national product, and the number of people who live on the edge of hunger.

Exponential growth can be recognized by the fact that it consistently doubles in a given period. After a doubling period of 1 year, for example, there would be twice as many rabbits as there were at the beginning. The rabbits multiply at the characteristic speed of rabbits which we can determine here to be two offspring per year for each couple. One rabbit couple becomes two in 1 year. The next year, both these rabbit couples will become two, so the total becomes four. The following year, they are eight and we can see the increase in numbers: 2, 4, 8, 16, 32...a series of descendent rabbits.

The point is that exponential growth is rapid but it is biological. The only thing needed is a strong sex desire (or a strong profitable project) and everything grows entirely by itself.

That is, if there is enough food. Most of the natural biological systems quickly find out that the exponential growth cannot continue forever. The fact is that when in 10 years there are over 1,000 rabbits perhaps there are not enough carrots. Then some of the offspring die and the growth slows down.

This happens with all exponential growth in nature: Whether it involves bacteria in leftover food, oil consumption in industrial countries, or epidemic occurrences, the exponential growth ends at one time or another.

The characteristic biological progress is thus a beginning phase with exponential growth, followed by a more toned down phase and eventually a phase of disorder when the rabbits fight over the food.

The AIDS disease increased with exponential speed at the beginning of this decade. Every year, twice as many patients were diagnosed as the year before. In Denmark during the eighties there has for several years been talk about exponential growth. Following are the figures for the number of AIDS patients: 1, 2, 4, 12, 17, 38, 68, 98. These figures cover the years 1980 through 1987.

With some good will, one can say that the figure series 17, 38, 68 represent an exponential growth with a doubling period of 1 year. (The same could apply to the figures 1, 2, 4 but they are so low that it is not possible to base statistics on them.) But much good will is needed to see an exponential growth in order to see exponential growth in the rest of the figures.

But that is exactly what the Danish medical profession has done for years. UGESKRIFT FOR LAEGER [Weekly For Doctors] has numerous times reported that the growth is exponential. The doctors of the State Serum Institute have said and written that. The health authorities have also done that.

It is first now, in October-November 1988, that the Danish AIDS statisticians of the State Serum Institute have admitted that AIDS is not at all growing at an exponential rate.

This admission has come after 1 year of criticism in which Inge Henningsen, lecturer at the Mathematics Institute of the University of Copenhagen, among others, on numerous occasions has criticized the authorities and referred to U.S. experiences, but all without many people listening.

Should it make any difference whether the AIDS cases grow at an exponential rate? It cannot, primarily because the understanding of the spread of the disease up to now is the basis for judgement of the future development of the disease.

The characteristics for exponential growth is that the growth should not be predetermined many years into the future before the entire Danish population lies in bed with AIDS or the oil consumption of the industrial world exceeds the solar energy radiation or the weight of the number of poor people on Earth exceeds the weight of our planet.

Such absurdities can only be found with the calculator of an undergraduate who is projecting figures—unless it involves a disease which combines sex and death. The same projections are found on the front pages of the newspapers.

The exponential growth in the number of AIDS patients will stop for at least two reasons. One reason is that people are living and conscious beings, they change behaviour when they feel that their lives are being threatened. The other reason is that even if people do not change their behaviour, the virus that produces AIDS is faced with resistance it cannot avoid: itself.

The AIDS virus kills its own hosts. Furthermore, the virus is stupid, in fact barely alive: The virus can only multiply by tapping the host's metabolism which will be redirected to reproduce the virus. So, when the hosts are dead, the virus is gone.

It is, of course, a macabre way of terminating the exponential growth but a combination of the two methods is the most probable: Firstly, people in the first risk group will change their behaviour (as Danish homosexual men already have done); secondly, the risk groups

will gradually be "used up," so that those who are infected, get sick and then die while the healthy have learned to protect themselves. That is why the exponential growth ceases.

It is common knowledge that it is easy to protect oneself against AIDS. The virus that produces the disease is only carried through blood contact and bodily contact (sex and pregnancy). The virus itself is not very infectious. Also, the circumstances under which the epidemic started was, as is well known, quite extraordinary.

Maybe it is our prejudice of other people's sexuality that has been the reason that few people have realized *how* extreme the conditions [for infection] must be. The homosexual environments were characterized by people with hundreds, even thousands, of *new* sex partners each year. Such sexual habits lead to an enormous spread of a strain of "harmless" venereal diseases—and then AIDS.

In environments with few sex partners per person, AIDS does not have the same chances at all. That does not mean, of course, that people do not get the disease from one single contact with an infected sex partner. But it means that *with respect to society* it is not a very big problem. Moreover, the *individual problem* is simply solved by using a condom every time a person goes in search of sexual pleasures. If a person is constantly involved in sampling sexual pleasures and does not care to have a steady partner, a condom should be used. If in doubt about the sexual partner, use a condom.

In Denmark, we have seen several years of exponential spread but then a decrease. A figure borrowed from the State Serum Institute publication EPI-NYT several years ago shows the great difference in the projection compared with today's figures. The prognoses the Danish public was subjected to earlier show that in 1990 we should expect about 2,000 cases here at home (today we have a little over 300 known cases). The new projection which is based on a much longer doubling time, showing that in 1990 we can expect 600-700 new cases.

These figures contain—in all their chilliness—an unbroken and almost incomprehensible human suffering. But these figures show clearly that the AIDS disease will definitely not spread as dramatically as previous predictions indicated.

That, however, means that the problem is less than expected. A massive aid apparatus should be implemented for the high risk groups which contain a reservoir of infected people: homosexuals, IV-drug users, prostitutes, and the Third World Countries. It is there that the concentration should be directed, not on the general population which is scared by campaigns saying that they must use a condom every time they have sex. This is a demand that is so unrealistic for most people that the consequence is passivity.

An AIDS epidemic among heterosexual people is not likely in a country like Denmark. This is now recognized by all involved authorities, also the State Serum Institute. In Africa, where the sexual intercourse pattern is totally different and the general—and in particular sexual hygiene—is extremely poor in relation to what it is in Denmark, a heterosexual epidemic is already in full swing. The same could occur in Greenland.

The lesson from AIDS is therefore relatively clear. Socially, we have learned that when sexual behaviour changes, the pattern of the disease also changes. The population has during the last decades accepted a rising number of "banal" venereal diseases such as syphilis and gonorrhea. Only when the deadly disease AIDS came on the scene, uncontested through the same infectious patterns, did the population opt to change its behaviour.

The changed behaviour has meant that the outlook for an exponentially increasing epidemic tends to decrease: The homosexuals have changed their behaviour and the disease never really reached the general population.

That is why the situation is not that bad at all, if the population maintains the changed behaviour. Many years ago, the United States went through the same development as described above. A dramatic drop in the "banal" venereal diseases has been observed due to the change in the contact pattern.

But now, the reports from the United States indicate that syphilis and gonorrhea are on the increase again: Unfortunately a well-known experience from the fight against epidemics. After 1 or 2 years of changed behaviour, everybody starts to relax again and has sexual encounters without condoms.

This is extremely simple: AIDS will only be a problem for us if we make it a problem ourselves. If we take our own sexual encounters seriously enough to celebrate them by using a condom, the AIDS disease does not have a chance.

AIDS is a *clear* problem. The Danish information campaign, which is considered the world's best and the most qualified, still owes us this simple information.

IV-Drug Users Main Concern

54002455a Copenhagen BERLINGSKE TIDENDE
inDanish1 Dec 88 p 3

[Article by Henning Ziebe: "AIDS Epidemic Less Severe Than Feared"; words in italics as published in original]

[Text] The most recent calculations show that by the end of 1990 there will only be 688 Danish AIDS cases compared with the previously feared 2,050 cases. But the figures should be evaluated with care.

The AIDS epidemic is obviously not developing as severely as the prognoses indicated. According to the prognoses, there would be 2,050 cases of AIDS in Denmark by the end of 1990, but most recent projections show that the figure might perhaps be "only" 700 cases. There is, however, a lot of statistical uncertainty tied to the estimate.

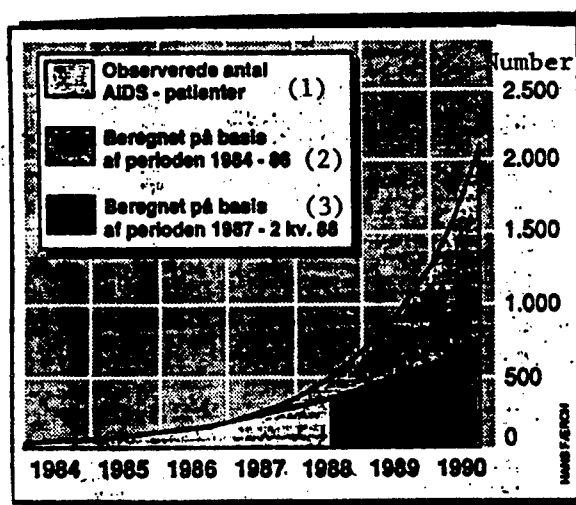
However, this encouraging report today, World AIDS Day, is accompanied by some concern among experts that it can bring about less alertness and perhaps a diminishing of the effort against AIDS which they feel would be catastrophic.

Attention is called to the fact that the epidemic continues to progress and there are more people this year who will be infected with AIDS than last year. One precondition for the statistical line of decline in the AIDS development to stay the same is therefore a continued effective effort against the spread of the HIV-virus.

The statistical projections are based on the epidemic developing with the same rate in the years ahead, and the expected AIDS cases will be calculated from that.

That was done previously based on the curve for AIDS cases in 1984-86. A continuation of this curve showed that if the epidemic developed at the same rate, the result would be 2,050 AIDS patients in Denmark at the end of 1990.

Now, the State Serum Institute has prepared a similar projection by using as a base the figures from the beginning of 1987 and to the second quarter of 1988.



Trend In The AIDS Epidemic: 1989-90

Key:

1. Observed number of AIDS patients
2. Calculations based on the period 1984-86
3. Calculations based on the period of 1987 through the second quarter of 1988

This curve is essentially more flat and ends with the figure 688 in 1990. The statistical uncertainty is, however, so great that the figure can fluctuate between 489 and 1,150 cases.

But in spite of that, the experts at the State Serum Institute say that it is justifiable to conclude that the AIDS epidemic will hardly develop as severely as feared.

There are, however, other reasons why such projections should be interpreted with some caution. The fact is that the AIDS epidemic consists of two epidemics: since the end of the seventies, the AIDS epidemic spread among homosexual men, and only in 1984 did it begin to spread among IV-drug users.

So far, only few IV-drug users have contracted AIDS but if there are 2,000 IV-drug users in Copenhagen and the surrounding areas, and if half of those infected develop AIDS, this group of the population alone will add 200 new AIDS cases in the next years. This possible figure is not included in the most recent projection because, broadly speaking, it depends on the incidence of AIDS among homosexuals. Moreover, the final figure may turn out to be higher than the one now estimated, warn the experts of the State Serum Institute.

Changed Sexual Habits

54002455a Copenhagen BERLINGSKE TIDENDE
in Danish 1 Dec 88 p 3

[Article by Henning Zibe: "Homosexual Efforts Provide Results"]

[Text] The use of condoms and fewer occasional contacts probable reason for the slower rise in number of AIDS-infected.

The drop in development of AIDS, which now can be demonstrated, is primarily the result of the fact that the homosexuals became aware very early on of the risk of contracting AIDS and firstly, they have used condoms and also had fewer sexual encounters with people they do not know very well, states Marianne Soeby, chairman of the Health Administration's AIDS Secretariat.

"It was namely in the homosexual environment that a lot of preventative measures were taken at an early stage, and it is probably the result of these efforts that we are now experiencing," says Marianne Soeby.

She adds that the epidemic primarily exists in the homosexual environment, although it is slowly spreading to groups outside that circle.

But it is impossible to find another explanation of the slower spread of AIDS than the very active preventative measures taken by the homosexuals from the beginning. The fact is that there is nothing that indicates that the AIDS virus HIV has changed character and that it has become less active.

Percentage for Frederiksberg

54002455a Copenhagen BERLINGSKE TIDENDE
in Danish 1 Dec 88 p 3

[Article by Hk: "Conference on AIDS"]

[Text] On the occasion of the International AIDS Day, the Frederiksberg City Council and members of the municipal AIDS committee have today gathered together at the Town Hall for a conference on AIDS.

Politicians want to have the AIDS committee inform them about HIV and AIDS and the information work that is undertaken, along with the strategy and activities that will be launched locally.

In connection with the day, Mogens Thiim (Conservative Party), who is chairman of the hospital committee, called attention to the fact that 14 percent of the registered AIDS cases occur in Frederiksberg. "That is a very high percentage when you take into consideration that the citizens comprise only 0.7 percent of the entire Danish population," says Mogens Thiim. However, Frederiksberg noted the day by a presentation of a poster that is painted by an artist from Frederiksberg, Jette Høgh, with text by poet Benny Andersen: Life Is Not the Worst Thing You Own.

Influenza Epidemic Claiming Many Lives

54002455b Copenhagen BERLINGSKE TIDENDE
in Danish 27 Dec 88 p 6

[Article by Henrik Larsen: "Large Influenza Epidemic Claiming Lives"; first paragraph is BERLINGSKE TIDENDE introduction]

[Text] Influenza is especially dangerous for people who suffer from heart and respiratory diseases. In fact, 250,000 Danes should be vaccinated annually against influenza, says a chief physician from the Serum Institute.

Influenza is a tricky disease. In fact, a very tricky disease. It is actually able to change "appearances" and therefore it is capable of attacking us again and again.

Broadly speaking, the disease behaves as follows: If a person has at one time been infected with a certain influenza virus, the person's immune system will form antibodies against this virus. In other words, build up a defense system if this cruel virus should again announce its arrival.

But the virus says "ha, ha. I do not want to be recognized, so I therefore put on a disguise, so the body does not know who I am. That way I will have peace to work."

WHO Has Groups of Experts

And that is what the virus does by changing its surface structure. When the virus enters the body, the immune system therefore does not react and the hullabaloo begins—with fever, sluggishness and aches and pains all over.

In order not to give the influenza epidemics a totally free reign, WHO has appointed a group of experts. Every fall, this group concocts a vaccine cocktail which contains the very antibodies effective against those influenza viruses that are expected to hit later in the year. This is somewhat of a gamble, but this year they spun the wheel just right.

The influenza vaccine that the State Serum Institute and the pharmacists have been distributing since early fall does in fact contain protection against A-Sichuan H3N2. That is the type of influenza that the Swedes have been so severely hit with in the recent weeks and now has crossed over to our side of Oresund.

The fact that the name of the virus is Sichuan can be explained with great logic: This particular virus was in fact first identified in the Chinese province of the same name. Correspondingly, the other component of the WHO vaccine is called A-Singapore H1N1 and the third B-Beijing.

Risk Groups

In most cases by far, a one-time bout with influenza means temporary discomfort—fortunately. But there are other groups of people for whom a bout with influenza can be a serious matter, says Dr Klaus Bro-Jorgensen of the Enterovirus Department of the State Serum Institute:

“This includes, for example, people who must be treated for lung problems or cardiovascular problems and children with cystic fibrosis. I think that a quarter of a million Danes have reason to be extra wary of influenza, and these people should definitely be vaccinated. In years of great influenza epidemics, that is when doctors report over 160,000 cases to us, it is also possible to notice the increase in the general death rate of 1,000 to 1,500 deaths.”

Vaccination

To be vaccinated *after* an influenza epidemic has been confirmed is, however, a tad too late. It takes approximately 12 days for the vaccine to take effect at best, and one can in fact easily get sick within that period.

“Those who are in the risk group, should be vaccinated in October/November,” says Klaus Bro-Jorgensen.

The influenza vaccines that are used in Denmark are imported from Holland and Germany. And there is no risk—not even a *theoretical* one that people can be infected with the HIV virus, underscores Bro-Jorgensen.

“The only people who could suffer discomfort from the vaccine are people allergic to eggs. That is because the virus that is used for the vaccine develops in eggs.”

He estimates that between 90,000 and 100,000 Danes have been vaccinated against influenza this year. The vaccine does not, however, provide absolute protection against influenza. The doctors estimate that the guarantee percentage to be between 60 and 80.

Death Raises Concern Over Meningitis in Hillerod

54002468 Copenhagen *BERLINGSKE TIDENDE*
in Danish 4 Feb 89 p 7

[Article by Erik Olsen: “Alert Against Meningitis Intensified”; first paragraph is *BERLINGSKE TIDENDE* introduction]

[Text] Because of two cases of meningitis in the same class at the Alholmskol in Hillerod—one of them with a fatal outcome—among other things, the alert at the town's central hospital and among the doctors on duty in Frederiksborg District has been intensified.

After a death due to meningitis in Hillerod, both the central hospital and the doctors on duty in Frederiksborg District are now on intensified alert. The dead individual is a 16-year-old student in the 9th grade at the Alholmskol, and one of his classmates is hospitalized with that dangerous disease.

Preventive treatment has been given to all the students in the class in question. Furthermore, all the school's students and parents have been advised on meningitis and the symptoms they should watch for.

Up to the present, 12 cases of meningitis have been recorded in 1989 in Frederiksborg District compared to 30 in all of 1988. Two have died from the disease. In addition to the 16-year-old student, an infant from Slangerup died.

The extraordinary measures with the intensified alert were decided upon by health inspectors since one of the 16-year-old's classmates was hospitalized last night, 3 February 1989, with meningitis.

A contributory cause is also the fact that a student who came into contact with the two above-mentioned ninth grade students, but who attends the M. Morks school in Hillerod, has also been attacked by this dangerous disease. Therefore, it is probable that the three infected each other.

“But meningitis can also be transmitted by disease carriers who have been attacked by the disease themselves,” says Health Inspector Jens Steensberg emphatically. “It seems that up to 10 percent of the population are disease carriers.”

The cases of meningitis that have been recorded have been of the so-called Type B, which cannot be vaccinated against. Only the immediate families and closest acquaintances of those attacked by the disease had been treated with preventive medicine without further steps being taken, up until yesterday—as is normal.

But especially because of the two meningitis cases in the same grade at the Alholmskol, the health inspector called Drs Tove Ronne and Susanne Samuelsson in from the epidemiological department of the Statens Seruminstitut for an emergency meeting with representatives of the general practitioners and doctors from the central hospital in Hillerod.

"We must urge the parents of children and young people to be especially careful. It is especially those people who are attacked," says Dr Tove Ronne. "Early treatment can ward off fatal cases. Even infants under six months of age can get the disease, which develops so quickly that one cannot even feel safe though no definite symptoms of a meningitis attack were found upon a first medical examination."

"The usual stiffness of the neck, for example, does not set in in this type of meningitis, so if the child has a high fever, is dull and apathetic—and has red spots on his or her skin—there is reason to sound the alarm."

The doctors continue to think that there is no possibility of an epidemic. They emphasize that the number of cases is small in the light of the some 330,000 inhabitants of Frederiksborg District. On the national level, there are about 300 meningitis patients per year. Between 10 and 20 of them die.

Greenland's Chief Health Officer Optimistic on AIDS

54002467a *Godthab GRONLANDSPOSTEN in Danish*
9 Jan 89 p 9

[Article: "Getting a Handle on AIDS"; first paragraph is GRONLANDSPOSTEN introduction]

[Text] More prophylactics are being bought and used than ever before. The epidemic seems at the very least to have halted, and the number of gonorrhea cases is half what it was in 1987.

The only effective anti-AIDS drug is continuous caution, and here in Greenland this course of treatment appears to be working. Condoms are being bought and used as never before, and Jens Misfeldt, the chief health officer, is optimistic, since the figures seem to show that, at the very least, the epidemic has halted. One positive byproduct of the AIDS scare is the fact that last year the number of gonorrhea cases in Greenland was half what it was in 1987.

"When it comes to AIDS, we have to be very cautious about anticipating our triumphs, but the figures show the number of cases rose sharply at the beginning of 1988, then after that the spread of AIDS almost stopped. Only at the end of the year did we see yet another HIV-positive case, so in all there were 13 here in Greenland," Jens Misfeldt told GRONLANDSPOSTEN.

Reliable Figures

The chief health officer also drew attention to the fact that he was using very reliable figures, since, during the past year, a survey was carried out in Greenland which is without parallel anywhere else.

Concentrating heavily on the traditional risk groups, a good 11,500 tests were conducted to detect AIDS. There were almost certainly ghosts in this statistic, but the chief health officer thinks it likely that approximately 10,000 persons were in fact tested. This is almost one-fifth of the entire population, and such a high figure is a reasonable guarantee of reliability. This is especially so when the investigators concentrated first and foremost on testing people from the risk groups.

Rub-Off Effect

The AIDS campaign, which has stressed the importance of using condoms and warned against multiple sexual partners and random sexual contacts, has had a positive rub-off effect on other sexually-transmitted diseases as well. This is true not the least of gonorrhea, which, in the eyes of the law, is a sexual disease on which records are kept.

In 1987, 6,400 cases of gonorrhea were treated in Greenland, and in 1988 this figure dropped to a little over 3,000. The number was thus more than halved.

"This is a very positive development, even if we are not at all as low [as we should be]," Jens Misfeldt said. That the situation can improve even further is shown by the fact that the figure for Greenland is almost exactly the same as the figure for Denmark, where the population is almost 100 times as large.

As for syphilis, by mid-1988 there was one case, after which the picture stabilized. There were about 350 cases of this sexual disease in Greenland in 1988.

New Public Health System Planned for Greenland

Addressing the Physician Shortage

54002467b *Copenhagen BERLINGSKE TIDENDE*
in Danish 30 Jan 89 p 4

[Article by Arne Notkin: "New Health System Coming"; first paragraph is BERLINGSKE TIDENDE introduction]

[Text] Good intentions. The health situation in Greenland is dramatic. But there is hope in the outside world, the Ministry of Public Health says in Copenhagen. Doctors are skeptical.

The days when newly-graduated physicians could go directly from their exams to a position in Greenland will now be over.

According to [Ministry of Public Health] section chief Jens Bech, the 16 Greenlandic medical districts will be staffed exclusively with physicians who have completed the often lengthy additional training of doctors with a general practice. As required, an individual doctor can supplement his training so he can manage those functions which go beyond those encountered in normal work by doctors in general practice here in Denmark. This would apply to food inspection, anesthesia, and minor operations, among other things.

Jens Bech: "The work in Greenland is professionally demanding and is a big medical challenge. There are positions there that we wouldn't give out to just anybody. We have not been expert enough at marketing work in Greenland, and we have not been as choosy as we should have been when doctors were assigned to Greenland—though, to be sure, there are now competent doctors up there."

As the preceding article demonstrated, however, Jens Bech's hard, current problem is that not even "anyone at all" applies for the 30-40 positions which currently stand gappingly open.

Better Than Denmark

Back to the future:

At the Queen Ingrid Hospital in Godthaab, which functions as a central hospital, the ministry is thinking about abolishing the senior residents positions, which are training positions. In their place only completely trained specialists will be employed. There would be only a limited number of senior residents positions for native Greenlandic doctors.

Jens Bech: "This is a public health system which is clearly better than the Danish one; patients will be seen only by completely trained doctors. But we do not believe there is any reason to burden the Greenlandic system with educational obligations when it is already burdened with a difficult economy and major problems stemming from difficult geographic and climatic conditions."

Above and beyond the ideal conditions which the proposal had to contain, the proposal solves the so-called merit problem which has plagued the Greenlandic public health service even more than the Danish.

To be recognized as a specialist or a general practice doctor, after their medical school training doctors have to do service in a number of different departments in the hospital system and with practicing doctors. Work in a Greenlandic district counts at most for one-half a year.

Time a doctor spends in Greenland beyond that half-year is more than time spent. From his isolated location, the doctor cannot in fact cultivate those personal contacts which lead to his next appointment in another place.

Research opportunities in Greenland are also limited, and, in Doctor Torben Ishoy's words, in terms of one's career, one is "more qualified if one has written a so-called scholarly article about a mouse's asshole than if one has worked in Greenland and had responsibilities and met medical challenges which far exceed most if what a doctor in Denmark encounters."

Erosion

A second problem is that the salaries and working conditions of doctors in Greenland are no longer as attractive as they once were when compared to conditions in Denmark.

Hedvig Pelle, the chairman of the Greenland Section of the Danish General Doctors Federation:

"The wages paid to doctors in Greenland have been eroded by rising taxes and housing costs in Greenland. With the latest wages agreement, salaries have been increased somewhat, but it hasn't been possible to get the employers to establish standards for work schedules. This means that a doctor in Greenland has to be available round the clock. This is clearly an unsatisfactory situation compared to the Danish agreements Greenland has to compete with."

The salaries paid to doctors in Greenland do not just compete with the official prerequisites of a full-time job at a Danish hospital. They must also compete with the innumerable opportunities doctors in Denmark have to supplement their incomes with other various secondary jobs.

Jens Bech, Ministry of Public Health section chief: "We recognize that when we demand more from the labor force we want, then we have to give something for it. We won't get quality if we're not willing to pay for it. As we see it, quality yields efficiency, and efficiency means less money spent and better service for the same amount of money."

Money From Transportation

Currently 110 million kroner per year are spent transporting and treating the more than 1,200 Greenlandic patients at the National Hospital in Denmark.

Jens Bech thinks this is "humanly and economically insane." Doctors at the National Hospital and in Greenland say that patients are now sent to Denmark "for trivial reasons."

If an effective, qualified and fully staffed corps of doctors can treat only 25 percent of these patients in Greenland, then doctors can afford to be "gilded" in Greenland.

Nevertheless doctors will not now raise their expectations regarding salaries too high for the upcoming negotiations on wage agreements.

Jens Bech: "We cannot run a respectable public health service staffed with gold diggers."

Doctors' calls for regulating work hours meet with incomprehension from Jens Bech.

"We cannot advocate setting up a 40-hour work week. We can't have three to four doctors in a district of 800 people. There's simply not work for more than one. If more come, they'll sit and pick their noses all day long. It may very well be that the attachments are greater than on a job in Denmark, but the actual work put in is not greater."

Lars Gehlert Johansen, the spokesman for doctors in Greenland: "We have never demanded a 40-hour work week. But we have called for some tolerable working conditions which would make it possible to function as a doctor for longer periods of time without getting worn out. With the current hours of work, a man can't touch a drop of alcohol throughout his life as a doctor. We're treated like inventory which is bought then discarded when it's worn down."

Five hundred Danish doctors are on the point of buying a practice for themselves, and 1,200 fully-trained specialists are waiting for older doctors to die or retire to get a permanent position in Denmark. But thus far these itinerant doctors have not tried Greenland. They are afraid the permanent positions in Denmark will slip by them if they go off. Therefore the prospect of a permanent position or a practice in Denmark after a time in Greenland is the only one which will get more doctors to go to Greenland.

The Public Health Ministry has now approached the Practicing Doctors Organization (PLO).

President Poul Schioler: "We have not yet discussed the matter. But I do not think that we can compel Doctor X to reserve his practice for a doctor who has come back from Greenland. Things are immediately different when new places are created in the system. Such places could, if the counties agree to it, be set aside for doctors from Greenland."

Poul Schioler said that, in his opinion, doctors from Greenland should be given preferential treatment when it came to enrollment in the federation's courses so they could create some personal contacts with Danish doctors in general practice who could later help them buy a practice.

Rene Birger Christensen, the chief district doctor in Godthaab, is not impressed:

"The doctors federations have to help solve the problems of the population up here. They have to help find some non-traditional solutions if they really want to do something. One way or another the PLO has to be able to get us a practice when we come home."

Lars Gehlert Johansen: "In the long term, there may be grounds to be moderately optimistic. But the Ministry of Public Health has not understood the seriousness of this acute situation, in which Greenland is being depopulated of doctors, many of whom have extensive and irreplaceable experience in Greenland. The Ministry of Public Health has to get off its backside to hold onto doctors."

Jens Bech: "We don't need doctors who don't believe in the future."

Greenlandic Health?

The attempt by the Public Health Ministry to solve the problem of the shortage of doctors in Greenland is one element in the ministry's work on a public health plan for Greenland and a plan for the Greenlandic public health system.

The work is being done in Copenhagen. Responsibility for health in Greenland rests with the Danish State and is financed by the Danish State.

Jonathan Motzfeldt, the prime minister of the home rule government: "It is the responsibility of the minister for public health, but we of course do want to have a rational dialogue. But the move has to come from her. She has to come up here to see what conditions are. The time is past when we discussed Greenland with ministers who hadn't been here and thus didn't know what they were talking about."

Jens Bech: "Of course we'll involve the home rule government in our work. Greenland's health problems can't be solved by a public health system. Alcohol policy, social policy, and a sound housing policy are just as decisive. And those areas fall to the home rule government."

Physician Shortage in Godthaab

54002467b Godthaab GRONLANDSPOSTEN
in Danish 9 Jan 89 p 9

[Article: "Fewer Patients Sent To Denmark Despite Doctor Shortage"]

[Text] At present 11 doctors' positions are vacant at district hospitals and 4 positions are vacant at the Queen Ingrid Hospital in Nuuk. From all indications, as of 1 April the number of vacant positions along the coast will have risen to 20, while the figure for the Queen Ingrid

Hospital will probably have gone down to 2. Despite the shortage of doctors, there is still no talk of there being a need to send more patients from Greenland to Denmark for treatment.

This is the somewhat surprising report which has come from Ebbe Eigaard, the chief administrator of the Public Health System. The only group of patients which has shown a rise in the number of treatments in Denmark over the past 3 years is eye patients.

In 1986, 89 eye patients were sent to Denmark for treatment, while the 1988 figure was all the way up in the vicinity of 280. This trend is not related to more frequent eye ailments but is related to new operative techniques. For eye cataracts, doctors in Denmark can now replace the eye's natural lens with a synthetic one, and patients are thereby spared the very thick and inconvenient cataract glasses. The decision was made several years ago that this new operation should be offered to Greenlandic patients, and it is the realization of this offer which has led to the rise in the number of patients sent to Denmark for treatment.

If we look at the exact figures, we see that in 1986 a total of 1,249 patients—including eye patients—was sent from Greenland to Denmark for treatment. In 1987 this figure was 1,350 and in 1988 it was 1,400. But, as has been mentioned: The increase is due exclusively to eye patients. All other categories are declining.

Furthermore, it would only be a matter of a few hundred thousand kroner to set up an eye department at the Queen Ingrid Hospital so the modern cataract operations could also be performed in Greenland.

The department would hardly need a permanently-assigned doctor—in any event no surgeon, since this work calls for very regular practice, and since, despite all else, the number of eye patients in Greenland is limited. Rather, what is preferred is getting a specialist from Denmark once or twice a year who could perform the needed operations—something akin to an assembly line.

Thirteen New Physicians

54002467b Godthaab GRONLANDSPOSTEN
in Danish 9 Jan 89 p 9

[Article: "Thirteen New Doctors' Positions"]

[Text] The number of doctors in Greenland will now be increased by 13, says a petition to the Folketing's finance committee from Elsebeth Kock-Petersen (Liberal Party), the minister of public health.

The increase is a result of a new agreement made in the fall between the Danish General Doctors Federation and the Public Agreement Commission in Greenland. The commission agreed to employ more doctors to "normalize the work load."

Two principal doctors and two senior residents will be employed at the Queen Ingrid Hospital in Nuuk, and nine assisting doctors in districts in Greenland, the petition specified.

Employment of the 13 new doctors will make it possible to treat many patients in Greenland who are currently sent south. Thirteen hundred patients a year are sent to Denmark for treatment.

The agreement is constructed in such a way that no money would be saved by not filling the doctors' positions. The additional salary money will in fact be divided among the other doctors in Greenland, the public health minister reported.

FINLAND

Singapore Virus Causing Influenza Epidemic

Hundreds of Soldiers Ill

54002451a Helsinki HELSINGIN SANOMAT
in Finnish 23 Dec 88 p 12

[Excerpt] Many hundreds of soldiers, debilitated by the influenza virus, will have to spend their Christmas holidays in military hospitals. The worst epidemics are now raging at the Parola Tank Brigade, Helsinki Naval Base in Upinniemi, Uusimaa Brigade in Dragsvik, and Karjala Wing in Rissala. All these four garrisons have had to put up temporary sick wards.

The virus, a particularly vicious strain, has also spread to the Uusimaa Dragoon Battalion and Salpausselka Anti-aircraft Battalion. This first influenza wave of the winter has so far caused a loss of 2,000 workdays for the armed services. Most of the afflicted—over 100 soldiers—have been at the Parola Tank Brigade. [passage omitted]

Epidemic Worst in Cities

54002451a Helsinki HELSINGIN SANOMAT
in Finnish 31 Dec 88 p A9

[Excerpt] An influenza epidemic is on the rise all over the country with the exception of Turku. According to Dr. Reijo Pyhala from the National Health Institute, the epidemic is as yet quite mild but is expected to peak in the first part of January.

The influenza epidemic broke out in southwestern Finland and proliferated at a steady pace in the largest townships. According to Pyhala, the rest of the country can expect to get its share after a while.

"It is a question of the same Singapore A-strain virus that was detected in Finland last April and May. The summer interrupted its progress, and now it continues exceptionally early as compared to other years," Pyhala stated. [passage omitted]

FRANCE

Some Hope Seen in Battle Against AIDS

53002494a Paris *LE MONDE* in French 8 Feb 89 p 48

[Text] A rapidly progressing AIDS epidemic and government funds inadequate for the care and support of patients and seropositive individuals: despite one piece of good news—the undeniable drop in the use of heroin—the annual report of the Marmottan Medical Center in Paris is pessimistic. "AIDS is everywhere," writes Dr Claude Olievenstein, the center's medical director, "and despair is a daily fact of life." In 1988, the Ministry of Health had still not allocated any funds for the care and support of patients or for organizing specialized consultation.

Marmottan is in crisis. Drug addicts with AIDS are deserting the center for general hospitals and social services, the report writes, [and] prefer "charlatans and sects which operate by intimidation." The repressive measures adopted by Mr Albin Chalandon when he was minister of justice are severely criticized, particularly the sharing of prison cells by serious drug addicts and light users. "Who will dare to say," writes Dr Olievenstein, "that we took the chance of condemning to death these young people through transmission of AIDS?"

Dr Olievenstein is more optimistic on other matters. Heroin use is in sharp decline and the number of French IV-heroin addicts is now probably under 100,000. In this population at very high risk of contracting AIDS, unrestricted sale of syringes apparently had the expected effects: according to a study conducted at Marmottan by INSERM, 61 percent of drug addicts have given up exchanging syringes.

The most recent statistics indicate that, at Marmottan, 30 percent of the drug addicts are seropositive. "We are far from the 70 or 80 percent which the patriarchy and certain virologists use to terrorize the ministry," concludes Dr Olievenstein.

Possible AIDS Contamination Through Acupuncture Discussed

54002464 Paris *LIBERATION* in French
26 Jan 89 p 40

[Article by Gilles Pial: "AIDS-Proof Acupuncture Needles"]

[Text] A very short letter published by the scientific weekly, *THE NEW ENGLAND JOURNAL OF MEDICINE*, on 26 January 1989 implies that the AIDS virus can be transmitted by unsterilized acupuncture needles. According to this publication, the first case involves a young 17-year-old boy "with no risk factors" who was treated for 6 weeks by the traditional Chinese medicine for "an obstinate tendinitis" and who is now a victim of the virus linked to AIDS. "In their hearts and minds,"

the doctors in Necker Hospital (Dr Bach and Dr Videcocq) and from Charles-Foix a Ivry Hospital who published this astonishing report attribute the AIDS-related viral infection to the acupuncture needles.

The news which was spread over the first page of yesterday's *QUOTIDIEN DU MEDECIN*—"Acupuncture and AIDS: A French Case"—is certain to fuel the age-old arguments over the risks of small needles in science. However, the brief report in *THE NEW ENGLAND JOURNAL OF MEDICINE* raises a multitude of questions and just as many shaded areas. What is the proof for this first specific example? There is none. Without being able to find the incriminating needles and perform a biological screening of all the acupuncturist's patients, there is no proof in this case. How is it that no other cases of transmission of this type have been reported since 1979, the time when the virus linked to AIDS probably first appeared, when millions of acupuncture treatments have been performed? If a risk of this sort exists, why hasn't AIDS been occurring more frequently in regions of the world where needles are not sterilized?

Since 1983, the date when an AIDS virus was first discussed, acupuncture has regularly been suspected of contributing to the spread of the HIV virus, but there has been no tangible proof. The climate of suspicion is basically linked to one precedent: that of hepatitis B. A professional disease afflicting doctors and dentists, hepatitis B is also clearly linked to unsterilized acupuncture needles. Two missions of the WHO at the end of the 70's demonstrated clearly that in China specifically, the incidence of the disease was high in geographical areas where traditional doctors did not sterilize their needles. Since then, the international medical press has published examples of transmission of hepatitis B by acupuncture, on a case by case basis or by "series" of patients: there was the report of 37 cases of hepatitis B found among patients of a single acupuncturist in Birmingham, Great Britain. The situation is somewhat complicated by the fact that many acupuncturists in some countries still refuse to soak their needles in 90° alcohol, which is certainly effective against the AIDS virus, but not against the hepatitis B virus.

However, the hepatitis B virus and the AIDS virus are substantially different from the standpoint of their degree of contagion.

The climate of distrust created by this initial French report should have at least one advantage: namely, to encourage acupuncturists, whether or not they are medical doctors, to use throw-away needles or to modify their needle sterilization practices.

IRELAND

Total of Fully-Developed AIDS Cases Reaches 71
54500065 Dublin IRISH INDEPENDENT in English
5 Jan 89 p 10

[Article by Stephen McGrath]

[Text] The Department of Health was putting all available resources into fighting the spread of AIDS among drug addicts, said Dr James Walsh, Chief Medical Officer at the Department.

"Trying to control the spread of AIDS in drug abusers in Ireland is a very difficult target. Up to 5,000 people here may be taking drugs," Dr Walsh said.

He revealed that in the general population there have been 71 cases of full blown AIDS, two more than reported yesterday for Ireland by the World Health Organization.

To date, at least 30 of these AIDS sufferers have died from the condition, including four children who contracted the virus from their mothers. In a couple of cases the mothers were not drug abusers and contracted the virus from the drug abusing fathers of the children.

WHO also reported that there are 787 victims of the AIDS virus here including 50 babies. These people were discovered in 21,000 tests done in clinics and hospitals around the country.

At least five million people worldwide are infected with the HIV virus and according to expert opinion 30 p.c. of them will go on to develop full-blown AIDS within five years.

So far the Department of Health has spent X[L]1m on a mass media campaign on AIDS. "We are putting resources into phone-in advice services and walk-in clinics where people can seek help without identifying themselves," said Dr Walsh.

The Eastern Health Board's Outreach programme is already providing a methadone as a heroin substitute. It also provides intensive counselling for addicts and free needles and condoms if they are necessary for individuals.

Soaring Rate of Tuberculosis Sparks Action Demand

54500064 Dublin IRISH INDEPENDENT in English
3 Dec 88 p 7

[Article by Geraldine Collins]

[Text] Four specialist doctors have called for urgent action to curb the soaring incidence of, and rate of death from, tuberculosis here—still the highest in western Europe.

A detailed national survey, undertaken by doctors, J. Stinson, P. Kelly, F. Howell and L. Clancy of Peamount Hospital, Dublin, has found that the incidence of TB in this country is two to four times that of Britain or Northern Ireland.

The doctors have called for a national consensus of TB management, tracing and treatment and have highlighted the need for greater emphasis on the illness in medical education.

They conclude, in the survey published in the Irish Medical Journal, that Ireland has an unacceptably high level of tuberculosis, particularly in young adults and children. But the reasons for the high levels here, where we do not have large immigrant populations, remain unclear. "We have had a state-funded, free tuberculosis treatment service for over three decades, yet, while the incidence had declined quite significantly, it has reached a plateau," state the doctors.

They add that a similar plateau phenomenon has been observed in most developed countries, but why it should be higher here than elsewhere remains unclear. "While some affluent northern European countries may be close to eradicating the disease, much work remains to be done in this country," they say.

Their analysis of mortality showed that the majority of patients spent an average of more than two weeks as in-patients in general hospitals prior to the diagnosis of TB being made and that treatment in many cases was inadequate, highlighting one of the consequences of lack of emphasis on TB in medical training.

They found there was no uniformity in the approach to management of TB, either at hospital or community level. While the difference between community care and hospitals were in matters of detail, the experts felt details were "important when dealing with a communicable disease."

Arising from the study they have made a number of recommendations which could help in eradicating the disease.

Medical schools should adopt a uniform approach to undergraduate training in TB and there should be a formalized approach to post-graduate training coupled with a comprehensive research programme.

An agreed reference laboratory service for identification of the disease should be established along with a national TB committee to set out an agreed policy with regard to BCG vaccination, the extent of contact tracing, evaluation of notifications and mortality patterns as well as clear guidelines on treatment, they suggest.

All directors of community care, hospital clinical consultants, and heads of diagnostic laboratories in the country were included in the survey.

There was a higher incidence of TB in the Eastern Health Board are (232), followed by the Southern Health Board (134), Western Health Board (75), North Western area (72), Mid Western (78), Midland (41), South Eastern (75) and North Eastern (49). the figures give an incidence of 21.37 cases per 100,000 population based on 1986.

Lung Disease Found Among Unusual Number of Youth

54500063 Dublin *IRISH INDEPENDENT in English*
23 Dec 88 p 2

[Article by Stephen McGrath]

[Text] Medical researchers have found that an "extraordinary number" of young Irish people are prone to a rare lung disease which can be lethal unless treated, it was revealed last night.

Young people in their 20s are being hit by the disease far more often in Ireland than almost anywhere else, a project funded by the Health Research Board has shown.

Doctors don't know what causes the disease and they are puzzled as to why it should have such a high incidence here where more than 5,000 people suffer from it.

The disease is sarcoidosis and a research team, led by Professor Muiris FitzGerald of St Vincent's Hospital, has been trying to unravel its mysteries. Its symptoms include irritation and inflammation of the lungs.

"One of the interesting things we have found is that 10 per cent of those who suffer from sarcoidosis have at least one relative who also suffered from it," Prof FitzGerald said.

New Hygiene Control Code To Safeguard Egg Industry

54500062 Dublin *IRISH INDEPENDENT in English*
10 Dec 88 p 5

[Article by William Dillon]

[Excerpts] A strict new code of practice for the poultry industry aimed at preventing any future salmonella outbreaks was announced yesterday by the Government.

Though the guidelines are not legally binding, Agriculture Minister Michael O'Kennedy warned that if they were not properly implemented by the industry, he would bring in "further sanctions" to ensure the highest hygiene standards are met.

The Department confirmed that there have been no new outbreaks of the disease since last week. But officials monitoring the situation privately fear that if the source of the disease is contaminated feedstuff, there may still be some which has not made its way through the food chain. [passage omitted]

The new code of practice involves strict hygiene guidelines for all sectors of the poultry industry, such as poultry houses, breeding farms, hatcheries, factories and egg packers. These include routine sampling of products and using only assured feedstuffs from reliable sources.

The Minister said speedy implementation of the code was not only desirable while the current scare persisted, but was essential in the future to maintain Ireland's growing international reputation as a producer of natural wholesome food under the most hygienic conditions. [passage omitted]

Fishermen Concerned Over Diseased Salmon

54500061 Dublin *IRISH INDEPENDENT in English*
16 Dec 88 p 13

[Excerpt] Disease control among salmon reared in cages was causing concern to fish farmers here and in Scotland, an environmental consultant told the High Court in Dublin yesterday.

Jack O'Sullivan, B.Sc., a member of the Institute of Biology in Ireland, was giving evidence on the second day of the appeal by 70 fishermen from the West Kerry Gaeltacht against a proposed salmon farm on the west side of Smerwick.

They claim an order made by the Minister for the Marine designating an area of the harbour for aquaculture is not in the public interest.

When the order is confirmed by the Minister, he will then grant a licence for the operation of the salmon farm.

Mr O'Sullivan said it was impossible to keep fish in a cage close together without some disease arising in them occasionally. This was causing serious concern in Scotland and Ireland at the moment.

One of the most serious conditions that affected salmon were outbreaks of sea lice. It may arise in one or two fish and while it was not possible to isolate these the infestation spread widely.

The treatment was the use of a toxic insecticide name Nuvan. While it was effective in treating the salmon, its toxicity was fatal to insects and crustaceous fish.

He said that the debris which would form beneath the fish cage could have the effect of encouraging plankton bloom which would have a serious effect on fish life. It was very important that there would be an adequate flushing of the sea water beneath the fish case by way of current. [Passage omitted]

ITALY

Milan Hospitals Facing Difficulty Over AIDS Cases

54002462a Rome L'UNITA (Supplement) in Italian
18 Jan 89 p 3

[Article by Marina Morpurgo: "Hospitals Alarmed Over AIDS Cases"; first paragraph is L'UNITA introduction]

[Text] The hospitals are alarmed over the AIDS cases. Last year the experts had predicted 1,090 AIDS cases in the Lombardy region. That prediction was almost perfect: now, in January 1989, we have 1,068 AIDS cases officially reported, 500 in Milan alone. The infectious diseases department of Sacco and Niguarda Hospitals are in crisis. What will happen in 1990 when AIDS patients will number 4,000?

The doctors of Sacco Hospital requested a meeting with the prefect. Dr Mauro Moroni and Dr Francesco Milazzo, the two physicians of the infectious diseases department, and Gilberto Bragonzi, health director, met at the prefecture with the prefect, Carmelo Caruso. The topic of the meeting was the AIDS situation in the city and in the whole region. This calamity was expected; the number of people infected with the AIDS virus had been predicted. Milan and vicinity lead the list, followed by Pavia, Brescia, Varese, Como, and Bergamo. The situation is less serious in Sondrio, Cremona, and Mantua.

The virus spread as predicted, but with a small, alarming alteration. The health director of Sacco explains: "We have a few cases that are inexplicable. This means that the virus is spreading among the heterosexuals, who are not in the 'risky' categories."

During the meeting, also, the most pessimistic prediction about the crisis of the health facilities was brought up. At Sacco Hospital, the 96 beds in the infectious diseases department are all occupied by AIDS patients. When a hepatitis or meningitis patient is brought in, no one knows where to put him. The hospital must improvise isolation beds or place these patients in other departments, endangering the health of others. The doctors also pointed out that if, by any chance, an epidemic of any sort were to break out in Milan, the city would be in real trouble. At Niguarda Hospital, where there are 35 beds for infectious diseases patients, the situation is identical. The rooms and corridors are overflowing with patients, visitors, and, at times, policemen. The health director of Sacco said: "We explained to the prefect that, when convicts are sent to us, which happens often, each patient comes with two policemen. If we have three convicts, there are six policemen walking back and forth in the corridor 24 hours a day. It is chaos."

AIDS patients from Milan are already being diverted to Bergamo, Pavia, and Brescia. But these cities are also overwhelmed by the situation. It was explained to the magistrate that the plan worked out by the region last

summer will not produce more beds for at least 2 more years. When the 140 beds at Sacco, 140 at Niguarda, 50 at San Paolo, and 15 at Policlinico (the latter for a study program) are ready, they will not be nearly enough. In fact, the forecast calls for 4,000 AIDS patients in Lombardy within the next 2 years, with 2,000 in the city of Milan alone.

The AIDS plan budgeted 70 billion lire for Lombardy. So far, only the 30 billion from the region has come. The 40 billion promised by the Department of Public Health is nowhere to be seen. After the meeting with the physicians, Caruso had a short talk with the under secretary of health. According to the press office of the prefecture, "Maria Pia Caravaglia, member of Parliament, has taken the responsibility for these problems." We wonder if they also spoke of funds.

Also dramatic is the nursing situation. At present, 10 more nurses are needed to take good care of the patients in the infectious diseases department at Sacco Hospital. Eventually, with the addition of the new beds, 30 more will be needed. All the other hospitals have the same shortage of nurses, and there are no new students. The Sacco school can train 100 students; this year there are only 30, and there are no new workers from southern Italy. A doctor explains: "Many nurses quit because working with AIDS patients is stressful and difficult. It is necessary to wear protective clothing, to be very careful, to constantly see patients die, and, in some cases, to even take physical abuse from patients who are psychologically distressed. In short, if by magic we could immediately have the necessary equipment, we could not operate it for lack of personnel."

Decrease in AIDS Cases in Latter Half of 1988 Reported

54002462b Rome LA REPUBBLICA in Italian
13 Jan 89 p 21

[Article: "AIDS Cases Decreasing"; first paragraph is LA REPUBBLICA introduction]

[Text] The first AIDS carrier was a Norwegian sailor dead since 1959—Three thousand cases of AIDS—Number of new cases decreases for first time.

Rome—The number of AIDS patients in Italy is decreasing. For the first time since 1983, when the dramatic counting started, there has been a decrease in reported AIDS cases. The second half of 1988 closed with 646 new cases, 51 less than the 717 reported in the previous half. Nevertheless, the number of AIDS cases in Italy since 1983 is still growing: The total is 3,008.

The new data were presented yesterday during the meeting of the governmental commission on AIDS held to design a prevention plan while waiting for funds to put it into effect.

Also decreasing is the number of deaths—195 in the first half of the year, 112 in the second. Some experts agree that it is too early to talk about an inversion of the epidemic, but it is indeed a very positive sign.

Another piece of good news comes from the International Conference on AIDS and Cancer being held in Venice. Dr Daniel Zagury reported on the first positive results of the vaccine he injected into himself 2 years ago. "The vaccine caused a strong reaction of my immune system against the HIV virus," said the French scientist, "and it seems to remain constant. But we need more proof."

In fact, before we exult we must prove that the positive reaction shown by Zagury's body will be obtained with other individuals. Afterwards we must also make sure that the immune reaction spurred by the vaccine is sufficient to prevent the infection. However, Robert Gallo, discoverer of the HIV virus, was very enthusiastic. He commented: "So far, Zagury's vaccine is the first to show such a significant defensive reaction of the body."

At the Venice conference, Gallo also reported on the oldest AIDS case identified in the Western world—that of a Norwegian sailor who often traveled to Africa. He died in 1959, and his case remained an inexplicable one of a person vulnerable to the most common infections. As happens in more advanced hospitals, however, the doctors froze a sample of his blood. They hoped, as it has happened, that someday new techniques would permit further analyses of the sample and the cause of his death could be discovered.

NORWAY

Vestfold Area Reports Success in Slowing HIV Spread *54002457a Oslo AFTENPOSTEN in Norwegian* *31 Dec 88 p 11*

[Article by Steinar Arneson: "Vending Machines Curb HIV in Vestfold"; first paragraph is AFTENPOSTEN introduction]

[Text] TONSBERG—There have been three new cases of HIV infection here in the last year and a half, and only one new case of the liver disease hepatitis-B in the past year. These are the cheering results achieved with the help of the liberal utilization of syringe vending machines in Vestfold.

"It's hard to document, but we think there are noticeable parallels in the development of the two diseases," county physician Asbjorn Haugsbo told AFTENPOSTEN. "Both diseases are caught by means of blood contact. Hepatitis-B has always been the scourge of drug addicts; but HIV has become their new death threat."

Haugsbø pointed out various causes behind the new data. He believes that both liberal utilization of syringe vending machines and improved general sexual hygiene among IV-drug addicts, plus better health information, have been the chief factors.

The health directorate has sent the results from the preventive health work in Vestfold to other regional doctors in Norway, denoting it as an ideal example.

The decrease in hepatitis-B cases is quite dramatic, from an average of 25 cases up to 1985, to only one in 1988. Total cases of HIV in Vestfold number 18, but only three of these cases were registered after 1 July 1987, when the syringe vending machines were set up in Horten, Tonsberg, and Sandefjord.

"Both of these diseases are common among the relatively heavy drug abusers in our county. In Tonsberg alone we figure that we have some 600 IV-drug addicts," Asbjorn Haugsbo said. He believes that if health authorities are successful in preventing hepatitis-B from spreading, they are also on the way to preventing the further spread of HIV.

The 18-month-old project in Vestfold has cost approximately 100,000 kroner. Each vending machine costs 25,000 kroner, but they are operated under a "pay-for-itself" principle, since users pay 10 kroner for each syringe.

Statistics on Women with HIV Infection Given *54002457b Oslo AFTENPOSTEN in Norwegian* *9 Jan 89 p 4*

[Text] More women than men have been exposed to heterosexual HIV infections. Among those who have been infected by HIV in Norway by means of heterosexual contact, 70 percent are women. Dissemination of HIV infection by heterosexual contact is on the rise. In July of 1988, 143 Norwegian women were infected with HIV. Forty of these had caught HIV from heterosexual intercourse, according to Drs Sonja Fossum and Marit Skogstad of the HIV Infection Department of the Oslo City Office for Environmentally-Induced Health Protection, in an article in the journal of the Norwegian Medical Association.

Concern Over Increase in Chlamydia Cases Reported *54002457c Oslo AFTENPOSTEN in Norwegian* *21 Jan 89 p 10*

[Article by Hanna Hanes: "Chlamydia Causes Childlessness"]

[Text] Thousands of additional couples may end up on the test-tube baby waiting list in the next few years as a result of chlamydia bacteria. The bacteria causes inflammation in the fallopian tubes and can seal them off without the woman noticing anything at all. Between 500 and 1,000 couples discover each year that chlamydia has crushed their dreams of having their own children.

"It shocks me more and more all the time, how sneaky chlamydia bacteria are. The symptoms they cause are vague, but the damage they do is great. Involuntary childlessness is a tragedy," says researcher Gabriel Anestad at the Government Institute for the People's Health (SIFF).

Together with a group of doctors at the Rikshospital, he has studied approximately 100 infertile women. Many had sealed or partially sealed fallopian tubes. Studies of antibodies in the blood indicated that chlamydia bacteria had been involved in 90 percent of the cases with sealed fallopian tubes. But only one out of three had known that she was ill at the time. Most of them had noticed nothing at all.

60,000 Infected?

Very many young people are infected with chlamydia. In the under-25 age group, as many as 50,000-60,000 young men and women may currently be infected, according to the journal of the Norwegian Medical Association. In 6,000 of these women, the inflammation will creep all the way up into the fallopian tubes, and perhaps seal them off. In this way a 16-year-old girl can lose her ability to have children, but not become aware of it until many years later.

"The best thing would be to have young people use condoms as a preventative measure. Then they would be protecting themselves against infection and future childlessness," says Dr Mette Moen, who participated in the study at the Rikshospital.

The women tend not to discover that the infection has made them sterile until they are in their 30's. The waiting list for test tube babies ought to get to a serious length in the 1990's, depending upon how many continue to find out about their own sterility. We have already seen a dramatic increase in the number of pregnancies outside of the womb on account of the number of people who already have partially sealed fallopian tubes.

More Than One Partner

—Why have the chlamydia bacteria increased so much?

—A lower sexual debut age, multiple partners and the use of birth control pills are probably the most significant causes. It used to be the case that gonorrhea was the most common cause of closed fallopian tubes.

Today 3,000 people per year find out that they cannot have children. Moen estimates that between 500 and 1,000 women become involuntarily childless each year as a result of chlamydia. This may mean that in the course of 10 years 10,000 women will find themselves on the waiting list for test-tube babies.

Treatment For Men

"Young women should go to the doctor if they suspect an infection, for instance if they have pain, or a discharge," Moen said. "We have good methods now, both to indicate that infection is present as well as to treat it."

"We seldom examine men, but they carry the infection just as women do. Right now we are mapping out the man's role in this," Gabriel Anestad announced.

UNITED KINGDOM

Sheep Suspected of Carrying Bovine Disease
54500060 London *THE DAILY TELEGRAPH*
in English 9 Jan 89 p 6

[Text] The Ministry of Agriculture has banned ruminant-based protein feed for sheep and cattle following the discovery in cattle of bovine spongiform encephalopathy (BSE).

More than 2,054 cases have been confirmed on 1,605 farms since the first diagnosis in November 1986. The disease has also killed two wildlife park animals—an antelope and an oryx.

Scientists have found that it is caused by the same agent as scrapie, a brain disease known for centuries in sheep and goats.

The Ministry's Central Veterinary Laboratory at New Haw, Surrey, concludes that BSE must have been caused by meat and bone meal, after excluding all other possible sources.

Investigators have not established whether heads of sheep that died from scrapie were in the food given to the cattle.

But they accept that diseased sheep heads are the most likely contaminant because all the animals had been fed meat and bone meal, and sheep "by-products" are a daily part of processed material.

There is widespread concern that the disease might be passed, like scrapie, from one generation to the next.

Processed animal waste is regarded by nutritionists as protein of high biological value in terms of essential amino-acid content, just as jelly babies and potato crisps are seen as a good source of energy.

But some have been appalled by the aspect of cannibalism in feeding hens and turkeys with protein from dead and slaughtered birds, and sheep and cattle with ruminant-based meat and bone meal.